

GENERAL LIBRARY
UNIV. OF MICH.
MAR 18 1900

*Columbia
University
Quarterly*



❖❖❖❖❖❖ PUBLISHED BY THE
COLUMBIA UNIVERSITY PRESS
VOLUME II : : : : : NUMBER 2
MARCH : : : : : 1900 ❖❖❖❖❖❖

The
Metropolitan
Life Insurance Company

(INCORPORATED BY THE STATE OF NEW YORK)

"THE LEADING INDUSTRIAL INSURANCE COMPANY OF AMERICA"

is represented in all the principal cities of the United States and Canada. The Metropolitan is one of the oldest Life Insurance Companies in the United States. It has been doing business for more than thirty years. It is the most progressive Life Insurance Company in America to-day. . . .

Present Clientage of Over Four Million Policyholders Attests its Popularity

Assets of over Forty-three Millions of Dollars, with
Liabilities of Thirty-six Millions and a Surplus of
Over Seven Millions of Dollars

DEMONSTRATES ITS FINANCIAL STABILITY

The payment of over two hundred death claims daily tells of the good it does. Insurance in force of nearly \$700,000,000 attests its greatness and favor with the public.

PERMANENT, PROFITABLE AND PROGRESSIVE EMPLOYMENT

Agents Wanted. Any honest, capable, industrious man, who is willing to begin at the bottom and acquire a complete knowledge of the details of the business by diligent study and practical experience can, by demonstrating his capacity, establish his claim to the highest position in the field. It is within his certain reach. The opportunities for merited advancement are unlimited. All needed explanations will be furnished upon application to the Company's Superintendent in any of the principal cities, or to the Home Office, No. 1 Madison Avenue, New York City.

OFFICERS:

JOHN R. HEGEMAN, President.	HALEY FISKE, Vice-President.
GEORGE H. GASTON, ad Vice-President.	GEORGE B. WOODWARD, Secretary.
J. J. THOMPSON, Cashier and Ass't Sec'y.	JAMES S. ROBERTS, Ass't Secretary.
JAMES M. CRAIG, Actuary.	STEWART L. WOODFORD, Counsel.
THOS. H. WILLARD, Chief Medical Examiner.	



A GOOD INVESTMENT

GIVE YOUR AID TO COLUMBIA

THE CENTRAL REALTY BOND AND TRUST COMPANY, 59 Liberty Street, New York City, is now receiving subscriptions to the capital stock (\$200,000) of the **MORNINGSIDE REALTY COMPANY**, a corporation having for its object the erection and maintenance of a dormitory building in the immediate vicinity of Columbia University for the exclusive use of the officers and students thereof.

The project has the official support and sanction of the Trustees of Columbia University. A considerable portion of the stock has already been underwritten. Subscribe now, thus making a first-class investment, and at the same time aid the university by bringing a larger number of students to her doors.

For further particulars and copies of the prospectus, address

THE MORNINGSIDE REALTY COMPANY

Care of the Central Realty Bond and Trust Company

59 Liberty Street, New York City

The Champagne Standard is

POMMERY

It commands the highest price at wholesale the world over because of its

INIMITABLE QUALITY

As it is usually sold by the bottle at the same price as other champagnes, you get a better wine for your money if you order Pommery—

THAT'S SURE

OLD DOMINION LINE

DAILY BETWEEN NEW YORK

AND

OLD POINT COMFORT
NORFOLK RICHMOND
VIRGINIA BEACH, VA.

AND

WASHINGTON, D. C.

Favorite Route from the North and East to the Resorts of
Virginia and North Carolina

FOR FULL INFORMATION APPLY TO

OLD DOMINION STEAMSHIP CO.

Pier 26, North River, New York

H. B. WALKER, Traffic Manager

J. J. BROWN, Gen. Pass. Agent

HAMBURG-AMERICAN LINE'S CRUISE AROUND THE WORLD

Upon the
specially constructed and
magnificently appointed new

TWIN-SCREW CRUISING YACHT "PRINZESSIN VICTORIA LUISE"

The unqualified success met with by the Annual Summer Cruises of the Hamburg-American Line to the Land of the Midnight Sun and the Winter Cruises to the Orient has prompted this Company to extend this delightful feature of its services to a

CRUISE AROUND THE WORLD

With this end in view, it has constructed a **Twin-Screw Cruising Yacht**, which is to be used exclusively for these cruises, and which by its size and especial arrangements will add materially to the pleasures of this delightful trip.

This yacht is 450 feet long, her breadth 47 feet, and her depth 30 feet. She will carry first-class passengers only, and will not carry mails or cargo.

The staterooms are equipped with everything to enhance comfort. Suites with private baths and toilets, staterooms for the occupancy of single passengers, magnificent saloons, a gymnasium for exercise and recreation, and a grand promenade are provided.

THE FIRST CRUISE AROUND THE WORLD

For which the following itinerary is proposed:

From HAMBURG, August 28. From CHERBOURG, August 30, 1900

Direct connection can be made from New York by the Hamburg-American Line's Twin-Screw Express S. S. Fürst Bismarck, leaving New York August 23, 1900, due in Cherbourg August 30, or by any earlier steamer of this line. **Lisbon, Gibraltar, Nice, Genoa, Athens, Constantinople, Jaffa (Jerusalem), Alexandria (Egypt), Port Said (Egypt), Ismailia (Egypt), Bombay.** Here the passengers may leave the yacht and make the grand overland tour through northern India, visiting **Ahmedabad, Jeyapore, Delhi, Agra, Calcutta, Lucknow, Benares, Darjeeling and Calcutta**, where they will again board the "Prinzessin Victoria Luise" and proceed to **Colombo, Calcutta, Singapore, Manila, Hongkong, Shanghai, Nagasaki, Kobe** (inland tour to **Hiogo, Osaka, Nara and Kioto**), **Yokohama (Enoshima and Kamakura; (2) Miyazoshita; (3) Tokyo; (4) Nikko), Honolulu, Hilo, San Francisco**, from which point passengers will receive railroad transportation to their homes.

The rates of passage for this Cruise Around the World will be given on application. Starting from San Francisco, the second Cruise Around the World will be begun, reversing the foregoing itinerary. For further particulars regarding these cruises address

HAMBURG-AMERICAN LINE

37 Broadway, New York 125 La Salle St., Chicago
5 Unter den Linden, Berlin
18 Dovenfleth, Hamburg
22 Cockspur St., London
7 Rue Scribe, Paris

CHINA

PRESSBURY, ADVE. AGENCY, N.Y.

JAPAN

COLUMBIA GRAMMAR SCHOOL

B. H. CAMPBELL, A.M., Headmaster

Prepares Boys especially for entrance to the several departments of Columbia University. Laboratories. Gymnasium. Primary Classes

FOUNDED 1764

34 and 36 East 51st St., New York

BOESÉ SCHOOL

FORMERLY THE RUEL SCHOOL

Boarding and Day School for Girls

Little Boys in the Primary

26 East 56th Street, New York

THE CUTLER SCHOOL

Since 1876 two hundred and twenty-two pupils from this school have entered college, and most of these have entered Columbia, Harvard, Yale or Princeton

20 EAST 50TH STREET
NEW YORK

INTERCOLLEGIATE BUREAU AND REGISTRY OF ACADEMIC COSTUME



COTRELL & LEONARD

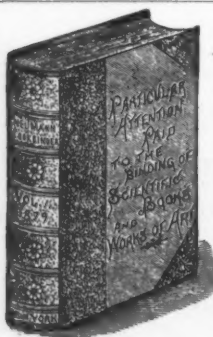
472-478 Broadway

ALBANY, N. Y.

Makers of Caps, Gowns and Hoods to Columbia, Harvard, Yale, Princeton, Johns Hopkins, Cornell, Williams, University of Chicago, and the others. Class Contracts a Specialty.

Gowns for the Pulpit and the Bench

Illustrated Bulletin upon application. Our New York representative will call upon request.



The Binding of Books for Learned Societies, Colleges and Libraries. Single Volumes or in Quantities.

NEUMANN BROS.

ESTABLISHED 1879

LIBRARY BOOKBINDERS

7 East 16th Street, near Fifth Ave.

NEW YORK

We make a Specialty of the Correct Arranging and Lettering of Works in Foreign Languages.

HORACE MANN SCHOOL

Teachers College, 120th St., West

New York City

Kindergarten, Elementary and High School Departments

College Preparatory and General Course

The Cambridge School for Girls

Familiarly called "The Gilman School,"

Aims to develop the highest type of womanhood that refinement and intellectual training can produce. The ideal is the highest, and no detail conducive to the best results is too small for the personal attention of the Director.

Arthur Gilman, A.M.

Each course is suited to the pupil, not the pupil to the course, and the pupils are provided with such careful and kindly attention as a mother desires for a daughter when away from home. The Manual describes the School.

No. 36 Concord Avenue, Cambridge, Mass.

MISS WHITON & MISS BANGS SCHOOL

A BOARDING AND DAY SCHOOL FOR GIRLS

CERTIFICATE ACCEPTED BY

SMITH

VASSAR

WELLESLEY AND

MT. HOLYOKE

43 West 47th Street

New York City



REFERS BY PERMISSION TO

The Hon. SETH LOW, LL.D., President of Columbia University

The Rev. W. H. FAUNCE, D.D., President of Brown University

The Rev. A. V. V. RAYMOND, D.D., President of Union College

The Rev. L. CLARK SEELYE, D.D., President of Smith College

The Rev. JAMES M. TAYLOR, D.D., LL.D., President of Vassar College

STENOGRAPHY and TYPEWRITING

MANUSCRIPTS

DUPLICATING

REPORTING

GENERAL SECRETARY WORK

PROMPT AND RELIABLE SERVICE

REFERENCES TO UNIVERSITY OFFICIALS

MISS CONKLIN

ASTOR COURT

25 West 33d St., Room 64

NEW YORK

Columbia University Quarterly

THE leading articles of the June number will be devoted to the School of Medicine (College of Physicians and Surgeons) and to Barnard College.

That number will also contain, among other articles, sketches of the lives of Presidents Wharton and Moore, by Mr. John B. Pine, and another instalment of Mr. W. A. Bradley's history of undergraduate publications at Columbia.

Announcements will be made of the program for Commencement week.

Contents of the Last Two Numbers

SEPTEMBER, 1899

The Training of Teachers, <i>Illustrated</i>	J. E. RUSSELL
The Beginnings of Teachers College	N. M. BUTLER
Myles Cooper, LL.D., Second President of King's College, <i>with Portrait</i>	A. L. JONES
Undergraduate Publications: I, 1812-15	W. A. BRADLEY
Commencement Day, 1899	
The College Man in Social Life	GOVERNOR THEODORE ROOSEVELT
Editorials, University and Alumni Notes, Student Life, Legislation, Bibliography and Statistics.	

DECEMBER, 1899

Graduate Work in the United States	E. D. PERRY
American and Foreign University Training	H. A. TODD
The Faculty of Pure Science and Scientific Societies	R. S. WOODWARD
Statistics of Graduate Schools	G. R. CARPENTER
William Samuel Johnson, LL.D., First President of Columbia College, <i>with Portrait</i>	A. L. JONES
Undergraduate Publications, II	W. A. BRADLEY
Cornelius Vanderbilt, <i>with Portrait</i>	PRESIDENT LOW
Nathan Russell Harrington, <i>with Portrait</i>	BASHFORD DEAN
Editorials, University and Alumni Notes, Student Life, Legislation and Statistics	

COLUMBIA

UNIVERSITY QUARTERLY

VOL. II—MARCH, 1900—No. 2

CONTENTS

The Library, <i>with Illustrations</i>	J. H. CANFIELD	101
How Books Reach the Shelves	H. B. PRESCOTT	108
The Avery Library, <i>Illustrated</i>	RUSSELL STURGIS	112
Coöperation with the Public Library	J. S. BILLINGS	118
The Study of Dramatic Literature	BRANDER MATTHEWS	123
Dorman B. Eaton	J. B. PINE	127
A History of Columbia University	H. T. PECK	133
Thomas Eggleston, E.M., LL.D.	C. F. CHANDLER <i>and</i> <i>with Portrait</i>	C. E. PELLEW 138

EDITORIALS	149
The Morningside Acropolis—A Beautiful Building—Mr. Rockefeller's Gift—Dormitories—Alumni Memorial Hall—Reorganization of Barnard College—The Resignation of Dean Putnam	
THE UNIVERSITY	155
Religious Activities—Special Students—Appointment Committee—Library—College—Law—Medicine—Applied Science—Political Science—Philosophy—Pure Science—Teachers College	
STUDENT LIFE, with Athletic Record	192
THE ALUMNI	199
Meeting of College Association—News of College Classes	
UNIVERSITY LEGISLATION	203
The Trustees, January and February	
STATISTICS	207
Growth of Columbia and other Eastern Universities	

COLUMBIA UNIVERSITY QUARTERLY

EDITORS

From the Faculty of Philosophy, CALVIN THOMAS, Managing
ARTHUR M. DAY, *Secretary* *Editor*

From the College, GEORGE R. CARPENTER

From the Faculty of Law, GEORGE W. KIRCHWEY

From the Faculty of Medicine, EDWIN B. CRAGIN

From the Faculty of Applied Sciences, ALFRED D. F. HAMLIN

From the Faculty of Political Science, WILLIAM A. DUNNING

From the Faculty of Pure Science, ROBERT S. WOODWARD

From Teachers College, JAMES E. RUSSELL

From the University Press, JOHN B. PINE

From the Library, JAMES H. CANFIELD

The QUARTERLY is issued by the Columbia University Press, with the approval of the Trustees of the University, and is addressed to the alumni, officers and friends of Columbia.

This magazine aims to represent faithfully all the varied interests of the University. It publishes historical and biographical articles of interest to Columbia men, shows the development of the institution in every direction, records all official action, describes the work of teachers and students in the various departments, reports the more important incidents of undergraduate life, notes the successes of alumni in all fields of activity, and furnishes the opportunity for the presentation and discussion of University problems.

The QUARTERLY is issued in December, March, June and September, each volume beginning with the December number. Annual subscription, **one dollar**; single number, **thirty cents**.

All communications should be addressed to the COLUMBIA UNIVERSITY QUARTERLY, at Lancaster, Pa., or (preferably) at Columbia University, New York City. Subscriptions may also be entered and single numbers purchased on the University grounds, at the University Press Bookstore in West Hall.





READING ROOM OF THE LIBRARY

COLUMBIA

UNIVERSITY QUARTERLY

VOL. II—MARCH, 1900—No. 2

THE LIBRARY

IT is very doubtful whether any change in the life and experience of the human race has been more rapid or more complete, during the last fifteen or twenty years, than the change in education. Even the marvelous shifting of all human relations due to our sudden mastery and application of the principles of electricity scarcely equals the results of this educational ferment. New buildings and new equipment, new men and new measures, new theories and new practices, new prominence given to public schools and public educational systems, new dignity and new value recognized in all primary work, new demands upon secondary schools and new requirements for entrance to college, new courses and new methods of instruction, new degrees and new ways of getting them, new electives and equivalents, new importance attached to the modern languages, a new thought about history and civics and economics and social science in general—small wonder that some of the older men shake their heads in bewilderment and declare that the youngsters are running wild and have all gone daft together; that the pace is too furious to last, that the gait is “abnormal” (the one word which saves the dignity of the many “normal” men who are fast dissolving in the

back-ground of the kaleidoscopic view of modern society), and that the "faddists" will soon come to the end of their rope and of their day. But the youngsters are well in the saddle and are not easily dismounted, and every day it is more and more apparent that they are riding to win.

In the evolution of the modern American university—and Columbia may be taken as an excellent illustration of an advanced type—the library has become a prime factor. Time was, and not so very long ago,—not entirely past, in some lamentable instances,—when the library was a miscellaneous collection of books and pamphlets, in great part donated, coming to the shelves by the last testament of some deceased alumnus or sent by various "relicts" because the family had no further use for the volumes. The library of one American university is said to contain quite one hundred thousand volumes of this sort of rubbish. The writer of this article well remembers being shown through the library of a small college (it was less than a hundred years ago and not a hundred miles from the capital of the one state which vies with the Old Dominion in its claim to be called "the mother of presidents") and securing an admission from the librarian that, of the "fifteen thousand choice volumes" reported in the annual catalogue, less than three thousand volumes were of any account whatever to the students enrolled in that institution. In the earlier days, even the reading matter actually possessed was inaccessible. An honored alumnus of Columbia declares that not so very many years ago the library of this institution was a place through which Freshmen and Sophomores were allowed to walk solemnly and quietly once a month; that Juniors were taken there once each week by a tutor and told about the books; that only the proverbially grave and reverend Seniors were allowed to read the volumes—and they could "draw" them only during one hour of each Wednesday afternoon. The writer well remembers being one of several students who petitioned the authorities of

Williams College, at a date at least later than the close of the War of 1812, to open the college library each afternoon of the week, instead of for two hours of two afternoons only; though at the present writing he has a grave suspicion that this action may have been prompted quite as much by the feeling that it was again time to stir up the said authorities and to assert and maintain the right of petition, as by any special eagerness to get at the few books then at all helpful to the students. Be all this as it may, until quite recently an open library was rare indeed. A library with its contents classified and catalogued in an intelligent way was almost unknown. The old-school librarian was literally "the keeper of the books," and never was as happy as when every volume was in its "proper place"—on the shelves.

The new thought of the library, and the place given it in educational economy, comes almost wholly with and from the rise and general acceptance of scientific methods, laboratory methods, in all instruction. Modern science has been a peculiar factor in modern education—somewhat noisy and brash at first, claiming everything in sight, and sweeping away all criticism and all opposition with a single wave of the hand; but later, beyond doubt, exceedingly helpful; and now come by good right into a royal kingdom of its own. And modern science has taught us all, and has proved to us all, that a single principle worked out from start to finish by the student himself is worth a dozen principles about which he has received information from an instructor, without either question or interest or even curiosity on his own part; and that the mental activity and the accuracy of that activity secured by the solving of even one problem is worth more than two dozen of the old-time parrot-like recitations. Under old methods it was only too often true that a student filled himself up hastily three times each day, and after each filling was pumped by an instructor, who carefully drew out all the student had taken in and

as carefully gauged his contents, making an accurate decimal record of the same—a process which naturally left the student about as empty at the close of each day as he was at the beginning. Under such a system, the laboratory and the library were unnecessary and unknown.

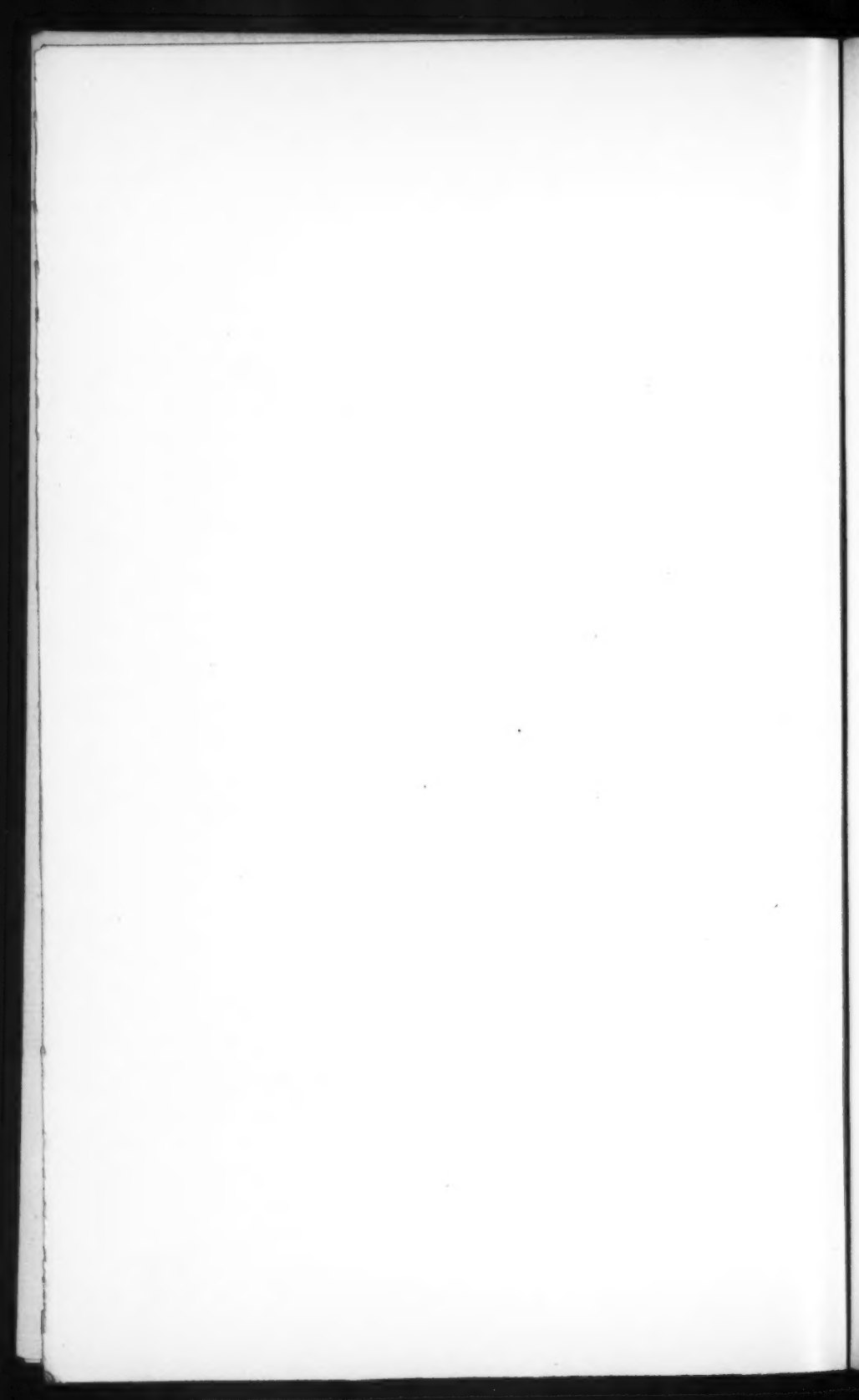
But under the new system the student began to think for himself and to speak for himself. In order that there might be developed in him a tendency to act and the power to act—and to act wisely, and in a safe and wholesome way—the student was set at work; and the time soon came when he wrought mightily, both with matter and with mind. It is hardly too much to say that there is four-fold more positive, direct, incisive, independent thinking among college and university men to-day than was known twenty-five years ago. This is especially true, if one includes in the reckoning the vast body of graduate students—a class of students scarcely in existence even twenty years ago.

All this, and more, has made the library the very heart of university life. It is not a museum, it has no “show-rooms,” it spends little or no money on rare bindings or upon other bibliophilic eccentricities—all very harmless, even very desirable, in other places. It is simply and always the scholar’s laboratory. No matter what his work may be, the scholar turns to the library daily and hourly for counsel, assistance, inspiration and newness of life. He recognizes that the best books are the best men and women at their best, always ready to be his most beloved and most helpful companions. The longer he associates with them, the more he is drawn to them and the easier he finds it to place himself under their spell. They supplement his weakness with their strength, his ignorance with their knowledge, his foolishness with their wisdom, his timidity with their courage, his uncertainty with their assurance, his doubt with their most positive conviction.

The library which is well equipped and well managed will do all in its power to foster and strengthen these rela-



SEMINAR ROOMS



tions. Its first thought, its most constant thought, is the reader. It must get books for him, it must get books to him, it must get him to books. By every ingenious device possible it must lessen the distance, and shorten the time, and make plain and easy the path between the student and these new friends. The library must always be a tempter—a good tempter, a successful tempter. It must know what its readers want and what they need; and it must supply as much of the former as will lead to the latter. The satisfaction of the reader is the sole object and aim of all wise and successful library administration. Books can be put anywhere and brought from anywhere; they can be stored in the heavens above, or upon the earth beneath, or in the caverns under the earth—all this matters little. The chief concern is to be given to those who use the books: to see that they get the books surely and quickly; and that for the use of the volumes they have light, air, a comfortable temperature, room and every convenience for writing and note-taking, with as much quiet and isolation as is possible. No expenditures in other directions can possibly make good any neglect or loss in these matters. No grandeur of buildings, no mere vastness or variety of collections, no ostentation of any sort whatever, can atone for the loss of opportunity or for unnecessary restrictions in the use of the volumes themselves.

To get books surely, demands either restriction in circulation or the purchase of large numbers of duplicates or something of both. Restriction in circulation is unquestionably the method which must be used by the greater number of the colleges and universities of to-day. A volume that is in even reasonable demand loses a great part of its effective value when it is withdrawn from the library, no matter who has it; for, with rare exceptions, the holder uses it but a small part of each day, and the rest of the time it is out of reach. Columbia opens its Library each week-day of the entire year, with only four exceptions; from

half-after-eight in the morning until eleven at night, during the academic year, and until ten at night even during the long summer vacation. When the new dormitories are built and occupied, and other opportunities for living near the University have been multiplied, we must surely put an end to even the possibility of having volumes stand idle on some remote shelves or lie forgotten in some out-of-the-way closet, while eager students are clamoring for them.

To get books quickly, demands department catalogues, in addition to the general catalogue; more study rooms of every description; reference librarians who can assist the worker to find exactly what he most needs and in the shortest time; more ready access by the general reader to all alcoves; a series of science seminar rooms, like those now known as "301" and "306," with the choicest books upon adjoining and accessible shelves. Many of the so-called department libraries, which are now scattered here and there, should be brought back to the common center. A suitable room should be set aside for maps and charts. The present law reading room should be given up to periodicals, and should contain all periodicals of every kind, with the bound and complete sets shelved on the side walls and unbound matter and pamphlets in the gallery above. The School of Law should have a suitable building of its own, and at once. To all of which must be added the maintenance and strengthening of the present service rendered at the loan desk and by the pages.

Though it is quite generally admitted that the Columbia Library, even now, presents extraordinary opportunities for the student and the investigator, more room and added general comfort for the reader will naturally come with the changes just noted. When University Hall is completed, and the executive offices are finally in their proper place; when the School of Law has its own building; when philosophy and education, history and political science, and the languages, each great division has a home of its

own—then the beauty and the utility of this noble memorial building will be appreciated as is now well-nigh impossible.

In the sub-basement will be rooms for storage and for packing and unpacking rooms. The basement will contain the stack rooms, the printing presses and the bindery. On the first floor will be the general offices, with the Librarian's office in the room at present assigned to the Dean of the Law School, the order department in the present office of the Librarian, the loan division and catalogue room occupying its present quarters *plus* all the floor space now used by the cataloguers, and the cataloguing department granted the present periodical room; also the reading room, the periodical room (now the law reading room), and the Avery Library, which will then include the two rooms adjoining it. On other floors and in the galleries above will be the seminar rooms, special collections, Columbiana, at least one room for the display of rare volumes and incunabula, at least one room for maps and charts, and small conference rooms and study rooms as space permits.

With a million carefully selected volumes easily within the reach of the then six hundred officers and instructors and the five thousand students of Columbia and its immediately affiliated institutions, and open to the use (in the building) of any citizen of New York who has special work in hand, the place and value of this Library will be clearly recognized and most gratefully acknowledged. And this fraction of a great city—with the noble Hudson and Riverside Park and Riverside Drive on the west; with Morningside Park and Morningside Drive on the east; with Grant's Mausoleum on the north and a beautiful Academy of Design on the south; and between these Barnard College, the Horace Mann School, Teachers College, Columbia University, St. Luke's Hospital and the superb Episcopal Cathedral—this small part of a mighty metropolis will then be known and sought far and wide as the Acropolis of the New World.

JAMES H. CANFIELD

HOW BOOKS REACH THE SHELVES

THE classification of a library, as we understand it to-day, is a growth of comparatively recent times. Formerly all libraries were arranged by fixed location, alcoves and shelves were numbered, and the books were given corresponding numbers and placed on the shelves in numerical order. Some attempt was made at rough classification, by assigning subjects to the different alcoves—as, science to one, art to another. But after a time the subject outgrew its alcove; and, as there were no vacant shelves near at hand, the remaining books were sent to another, often a remote, part of the building. The principle of *relative* location, which assigns a number to a subject and not to a part of the library, and which permits the indefinite growth of a subject while keeping the books together, was the natural outgrowth of these conditions. Of the various systems of relative location, those of Mr. Dewey and Mr. Cutter are perhaps the best known and most widely used. It is in the Dewey system—which, with some modifications, is in use in the Library of Columbia University—that we are chiefly interested.

The Dewey system starts out with ten general classes, numbered from 0 to 9, as follows:

0	includes General Works.	5	includes Natural Science.
1	“ Philosophy.	6	“ Useful Arts.
2	“ Religion.	7	“ Fine Arts.
3	“ Sociology.	8	“ Literature.
4	“ Philology.	9	“ History.

Each of these large classes is subdivided into ten smaller ones; each of these again into ten; and so on, almost *ad infinitum*—until a book on the most highly specialized subject has its own number and distinct place on the shelves.

To illustrate: Take the number which represents an

eclipse of the sun—523.78—and dissect it. The 5 stands for natural science, as we have already said. Of its ten sub-divisions, 2 stands for astronomy. This again is subdivided into ten, of which 3 covers descriptive astronomy. The number now stands 523; and in a small library, with few books on a subject, these three figures, representing the grand divisions of the subject, might be sufficient. In a large collection, however, where a book on the eclipses would be lost among the mass of books on descriptive astronomy, the decimal point can be added to separate this complete number from still further sub-divisions, and the process may be carried on. Descriptive astronomy is divided into ten classes, of which 7 stands for the sun; and this again into ten, of which 8 stands for eclipses. Now the classification stands complete—523.78; and to the initiated this is very simple.

But it will readily be seen that in such an array of numbers the outsider, the uninitiated, would soon be lost. He could not be expected to remember that 560.943 meant the paleontology of Germany, or that the history of the late Spanish-American War would be found in 973.81. It means everything to him, however, to find the books on the subject which he is investigating all together; and it is the business of the librarian and his assistants to know just where these books are to be found, and either to take them to him or to direct him to them. Much of the complaint over the classification in libraries arises from the fact that the reader gropes blindly about among the bewildering array of numbers, trying in vain to guess what they mean; instead of making his wants known to the person in charge, and being put quickly and easily in possession of the information which he needs.

Few people, outside of library circles, have any adequate idea of the amount of work necessary to place a book on the library shelves. Perhaps it would be interesting here to give the history of a book in our own Library, from the

time it is ordered until it finds its resting-place on the shelves or in some impatient reader's hands. Let us take, for example, John Fiske's *Civil Government in the United States*. The order department, receiving an order for the book, first of all looks it up in the catalogue, to see that it is not already in the Library, and among the order-files, to see that it is not already ordered and on the way. It is then listed in the order-book, and given an order-number and date; and also entered on the account-books, under the fund from which it is to be bought. The order-card goes then to the bookseller, who makes a record of it and returns it at once; and it is filed with other outstanding orders. When the book is received, the order-card is taken out, dated, and the price of the book is penciled thereon. It is then checked on the order-book and on the fund list—that is, the entries for that order are marked with date of receipt and price; and finally it is filed with the received orders, while the book is handed to a clerk to be entered in the accession-book. The accession-book, as its name indicates, is a complete list of the books in the Library, arranged in the order of their reception. It also contains a brief description of each book and a record of its cost, with notes concerning the binding, and with the name of the donor, if the book is a gift. This is one of the most important business books of the Library, and is invaluable for reference. Each entry is numbered, and the accession-number of each book is stamped on the page immediately following the title-page; so that one can tell from each book just how many volumes the Library contained at the time of its reception.

The book is now sent to the basement, where one of the pages cuts the leaves, pastes in the book-plate and the pocket, and embosses it—that is, stamps upon the title-page and upon each plate-page, or full-page illustration, the mark of ownership. The next step is to send the volume to the cataloguer, whose business it is to look up all information neces-

sary for the author-card, and for any editor-, translator-, publisher-, or series-card that may be necessary. In the book which we are considering, the author-card fills all requirements. The cataloguer looks up the author's name carefully in the Library catalogue, in order to have this entry uniform with any other entry of the same author which may have been made. If the name is not already entered there, she turns to the various American biographies, to get his full name with absolute correctness and also to ascertain the date of his birth. When the materials necessary for the formation of the author-card have been thus collected on a slip of paper, she makes a rough entry of the author (name and date of birth), title, place and date of publication, size and paging; and sends the book and the slip to the reviser, who carefully examines them, to see if the entry is correct and complete in form. The reviser then adds the information necessary to form the subject-card, "United States Constitutional History," which in the case under consideration is required, in addition to the other card. The book is then classified in accordance with the scheme which has already been outlined, the number being 342.973. But there may be a hundred constitutional histories of the United States in the Library, each bearing this number. To distinguish this particular book, a number taken from the author's name, according to a special scheme prepared by Mr. Cutter, is placed below the class-number, the whole forming the "call-number" of the book, written thus: $\begin{Bmatrix} 342-973 \\ F54 \end{Bmatrix}$. This call-number is likewise indicated on the slip, and the book and the slip again move on, this time to a copyist.

The cards which the reader finds in the catalogue are now prepared from the slip. The call-number is then copied on the book-plate; the book-card, used afterwards to record the loaning of the book to readers, is written; and everything is sent to a proof-reader. The proof-reader compares the slip and printed cards, notes whether the

book is marked correctly, slips the book-card into the pocket, and sends the cards to the head cataloguer. Here they are revised for the last time; and the subject-card, now ready for the catalogue, is put there at once by a young man who devotes most of his time to that work. The author-card, however, is sent to the shelf-lister, to be entered in the "shelf-list," or complete list of the books in the order of their classification—a record which, since it corresponds with the arrangement of the books on the shelves, is invaluable in making the annual inventory. This completes the history of the card, and it now goes to join its comrade in the catalogues.

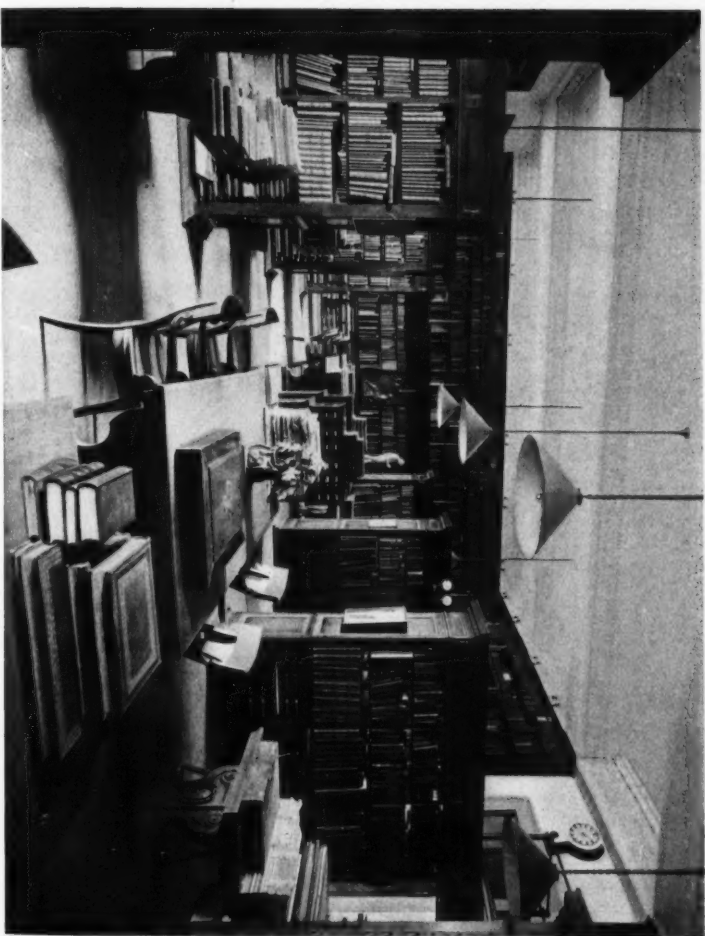
The cards having found their resting place, we may go back to the book, which was left in the proof-reader's hands. She sends it to the gilder, who puts upon the back in gold letters the call-number. The supervisor of the shelf department then sees that it reaches its proper place on the shelves.

So the story is ended. But, after all, only those who work at it day after day can know all that adding a book to the Library really means.

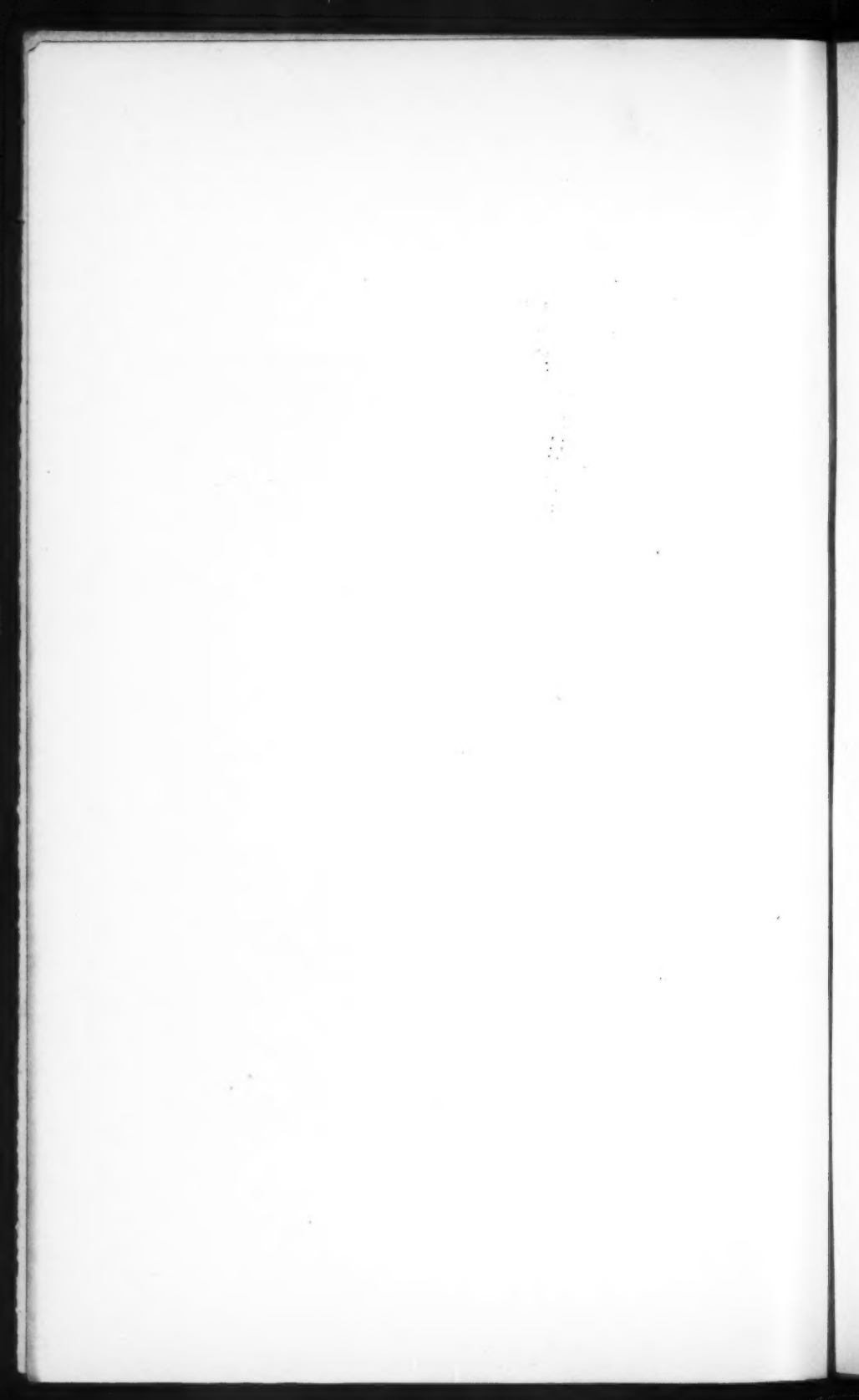
HARRIET B. PRESCOTT

THE AVERY LIBRARY

CAREFULLY specialized libraries are not common anywhere; and those which are of notable size are so rare that an exhaustive list of them would not fatigue the eye or the brain, if every word of it had to be read. It is one thing to publish classified lists of the contents of a general library, calling attention to the number of books in a given department which the said library contains, and quite another to possess a library which has been founded with the deliberate purpose of limiting its scope, and of thereby ensuring the comparative completeness, of its col-



AVERY ARCHITECTURAL LIBRARY



lections in the department chosen. The enlightened liberality of Samuel Putnam Avery and his wife, and their parental affection for a son who was taken from them at a time when he should have begun to gather reputation as an architect, has given to Columbia University the rare distinction of possessing such a special library; and that with the express intention of having it afford the largest possible aid to students who are not of necessity closely connected with the University itself.

The scheme of the founders of the Avery Architectural Library has been, from the beginning, that of providing all the books necessary for the theoretical study of architecture and the decorative arts, and opening these books freely to the world of scholars. It might even be said, without fear of contradiction, that the University was chosen as the recipient of this splendid gift largely because of the liberal arrangements made by the Library, with regard to the hours of its accessibility and the conveniences afforded students.

There are now—January, 1900—about sixteen thousand volumes in the Avery Library; but that number is quite deceptive, if one compares it with the total number of books in a library of general literature. Whatever may be thought the average cost of volumes in a general library,—whether that price per volume be fixed at \$2.00, as in some cases, or at a lower sum,—the average cost of books in a library of fine art is out of all comparison greater. Nor are the books devoted to the fine art of architecture, its history and its criticism, an exception to this rule, unless it be thought that they are, on the whole, more costly than are those which would be devoted to another branch of the fine arts. All collections of books of this general character include disproportionate numbers of folios and large quartos crowded with plates; and if the student of painting, of sculpture, or of prints has need of many costly books of this character, his study leads him through many a small octavo or duodecimo volume of general his-

torical research and of criticism. Few of this latter class are found in an architectural collection. There nearly all the books will be works of illustration; and even a stout octavo is the exception among the crowd of larger and more stately volumes. The average cost, therefore, of books on architecture is very high indeed, and sixteen thousand volumes represent the outlay and occupy the space which would otherwise be considered fitting for a library of perhaps forty thousand separate books. On the other hand, good books on architecture are not generally scarce, nor are the very best books in this department hard to come by. The very best books are the latest books, as a general thing; and the advantage which Mr. Avery and his purchasing committee have had is that they were free, in 1891 and the years following, to look over the whole field and to decide with some care which books were most needed and which of the great list of possible purchases might be disregarded—either altogether or until a more favorable time. There is, of course, the terrible question, how to keep up with the constantly growing list of books of our own day, costly and precious books which fill gaps in the field of study that have never been filled before; but the Avery Library is fortunate in this, too, that it has a permanent fund due to the same intelligent generosity which brought about its foundation.

The remedy for the ills produced by a smattering of knowledge is the acquisition of more extensive, more profound and more accurate knowledge—a fact hardly to be disputed by college-bred men. When, therefore, we are told that archæological learning has been the ruin of modern architecture, considered as a matter of fine art, it will not be hard for university men to see that there is something to be said in favor of pushing our researches further before we despair. It is not, indeed, a cheering spectacle to see a dozen famous architects building in a dozen styles, and taking the details of their most costly and most care-

fully planned buildings directly from ancient buildings in which those details were applied in a totally different connection. This much harm the books and the photographs are doing; but the remedy seems to be to push our studies on, until the students learn, not only what the doorway of the Erechtheion or the Corinthian order of the Olympieion was really like, but also what the architectural members in question signified to their designers and what was their mission in the buildings which they adorned. The time will come, and that speedily, when practicing architects will stop copying the Doric order from the Theatre of Marcellus and applying it to buildings of absolutely dissimilar character, and when they will pursue their studies far enough to learn what the Roman designer was about—what he intended, how he thought out his work, and how his successors may learn something from him. The remedy, then, for the ill effects of the twenty volumes and the five hundred photographs which the architect himself possesses is found in the long array of folios and in the tens of thousands of photographic and engraved representations contained in a library of architecture which is worthy of the name.

For the study of the critic—as for the study of the historian, the lover of fine art, the curious investigator into ancient habits of mind and modes of thought—there is necessary not even the word of encouraging suggestion which it has been thought well to offer to those who are despondent about modern fine art in the way of decoration. Our archæological studies of the past fifty years have gone so far that we know, as it has never been known before, how nearly all the arts are one and how closely all the epochs which have been great in art have been connected by not untraceable lines of natural growth. Every fresh excavation, every new volume devoted to the study of the past, not only adds another stone to the rising temple of our knowledge, but, in a different way, changes the charac-

ter of all that has gone before, and makes all the other volumes—half understood before—newly elucidated, newly enlarged, newly glorified sources of enlightenment. The archæologists know enough to begin with the latest books and go backward. If one were to start upon a month's research into the origin of the Corinthian style, he would begin with the very latest authorities and see what they might have to say about their predecessors, each and all. So enlightened, our student would take up the examination of the facts revealed and the opinions expressed by the older volumes with a more intelligent eye. Fortunate, then, is he who has in one spacious room the books, old and new—nearly all the books, in fact—which his studies require.

In what has been said above, there has been too absolute an assumption that the library we are thinking of is devoted to architecture, and to that alone. In fact, all the decorative arts are represented there; and it is only by their superior number and importance that the books devoted to that chief of the decorative arts which we call architecture overshadow those devoted to coins and medals, to mural painting, to architectural sculpture, to enameling on metal, to heraldry or to costume. The line has been drawn so as to include all of those fine arts which are used deliberately with decorative purpose—that is, used to adorn permanent structures and their immediate and closely dependent movables. Thus, the study of ecclesiastical architecture would be incomplete, without the means of referring at will to what is known concerning liturgical equipment of all sorts, including even embroidered robes and enameled bronze censers. Nor can a church be rightly understood, unless the significance of the armored effigies upon its tombs, and even the heraldic bearings upon their shields, be also seized and considered in comparison with the details of the building itself. It has been kept steadily in view, therefore, that no decorative art must be ignored. Painting, in the sense of an "easel-picture;" sculpture,

in the sense of a free statue which may be placed in a private man's library; engraving, considered as a means of multiplying prints on paper or vellum; illuminated manuscripts; even coins and medals, when not of unusual size and dignity; and the fascinating subjects connected with the study of ceramics, except as pottery is used for architectural adornment—all these have been generally avoided. The subject is vast enough and the demand upon the library's resources peremptory enough without including these. If we were to translate freely the title of an excellent book known to all students, and to say, "architecture and its complementary arts," we should be expressing, as nearly as five words can, the range and character of the Avery Memorial Library.

RUSSELL STURGIS

NOTE

Upon request, and free from any expense whatever, the University will issue a reader's card to any citizen of New York (known to the Librarian of the University or properly introduced) who may be interested in the subjects discussed by Mr. Sturgis and covered by the Avery Library. This card will entitle the holder, not only to the (practically) unrestricted use of the Avery Library, but also to the privileges of the general reading room, within which are ten thousand carefully selected volumes, directly accessible to all readers, and to the usual reading privileges of the entire Library, now holding upon its shelves nearly three hundred thousand volumes. The Library is open each week-day of the year, except Thanksgiving Day, Christmas Day, Good Friday and Independence Day. The hours are from half-after-eight in the morning until eleven in the evening, from October to June; and until ten in the evening, from July to September.

J. H. C.

COÖPERATION WITH THE PUBLIC
LIBRARY

I AM requested by the Editors of the QUARTERLY to furnish a short paper on "Coöperation of the Columbia Library with the New York Public Library. How far is coöperation practicable or desirable? What form should it take? What steps have already been taken?"

Taking the last question first, it may be said that the steps already taken in coöperation have been exchanges of duplicates, the printing of conjoint lists of periodicals, in the *Bulletin of the New York Public Library*, and the limitation of purchases in certain departments by one of the two libraries, leaving such purchases to be made mainly by the other library.

When the Columbia Library was moved to its present quarters, it sent a large mass of duplicate pamphlets to the New York Public Library, and the latter has made some return of the same kind of material, but is still in debt to Columbia on this account.

The printing of classified lists of the periodicals in the two libraries, with an indication as to which library contains each periodical, began in the *Bulletin of the New York Public Library* in February, 1897, with a list of the periodicals relating to language and philology. Since that date, similar lists have appeared in the *Bulletin* relating to mathematics, astronomy, chemistry and physics, archæology, geology and mineralogy, botany, gardening and horticulture, zoölogy, meteorology, natural history in general, geography, anthropology, American history and genealogy, science in general and the publications of learned societies, technology, general history and archæology, literature, art, and music, making in all 227 pages. Similar lists are in preparation for statistics, economics and sociology, and others will follow.

With regard to the limitation of purchases in certain departments, I can only state the course that is being pursued by the New York Public Library. The classes of books in which this library is richest, and in which its purchases are at present chiefly made, are: 1. American history, including that of the United States, Canada, Mexico, Central and South America, and the West Indies. 2. American genealogy. 3. American literature. 4. English history and literature. 5. French history. 6. Dutch history and literature. 7. Oriental history and literature, including Assyriology, Egyptology, Sanskrit, Arabic and Persian literature. 8. Jewish history and literature. 9. Russian literature. 10. Norse literature. 11. Technology, especially engineering. 12. Economics and sociology. 13. Decorative and applied art. 14. The graphic arts. 15. Periodicals and transactions of learned societies of all kinds, but always with reference to what is known to be in the Columbia University Library, especially as regards the older periodicals.

The classes of books in which the purchases of the New York Public Library have been comparatively small during the last three years are systematic botany and zoölogy, geology and mineralogy, doctrinal theology, private law, medicine, education, Italian history and literature, astronomy, architecture and fiction. There are other classes of books in which the Library has good historical collections, such as geography, mathematics and music, and which should be extended when funds are available, but in which purchases are quite limited at present.

We come now to the main questions: "How far is coöperation practicable or desirable, and what form should it take?" That coöperation between the two libraries is desirable, may certainly be taken for granted. Even when Columbia has the "million carefully selected volumes" predicted by Dr. Canfield, it is probable that the New York Public Library, with its additional two millions of

volumes, will still be found occasionally convenient and useful to the officers, instructors and students of Columbia; and the Columbia collections are sure to supply material which the other library will not obtain. The theoretical possibilities or desirabilities of coöperation would apply to the selection and purchase of books, the exchange of duplicates, the solicitation of gifts, the cataloguing, the printing of catalogue cards or of joint class lists, the lending of books, and the granting of special facilities, such as access to the shelves, to special students. The practical question as to what can now be done in the way of coöperation covers a much smaller field, but its answer involves the consideration of details which have not yet been studied, and which I shall not try to discuss in this paper.

In the present condition of the New York Public Library, which is overcrowded and has much back work to do, in cataloguing and arranging its books so that they can be fully available when its new building is occupied, it has been found necessary to withdraw all special alcove privileges. It can, therefore, offer few special facilities to the professors and students of Columbia at present. It can do much for them in the line of its special collections, but little more than it is prepared to do for any of its readers in the general reading rooms.

Very few of the books now in the New York Public Library which are specially valuable for reference can be loaned under any circumstances, and this applies especially to periodicals of all kinds and to works of an historical character. Books which can be loaned in the future must, for the most part, be obtained with that special purpose in view and so designated. On the other hand, the New York Public Library will very rarely desire to borrow books from Columbia for the use of its readers, because it will cost readers less trouble, time and money to go to Columbia than to obtain books from thence through the New York Public Library. There will be occasional exceptions to this rule, but they will be few and far between.

With regard to coöperation in the selection and purchase of books, some agreement can no doubt be made without much difficulty as regards a few special classes: for example, it is not probable that Columbia will wish to purchase rare Americana, or that the New York Public Library will buy much in systematic botany or entomology; but in many fields the two libraries are likely to desire the same things, and opinions as to the need for this or that special class of books will change from time to time, so that any agreement as to buying or not buying books in Spanish history, or Dutch literature, or architecture, or music, can be only provisional and temporary. The question as to what shall be omitted in trying to build up a great reference library is not easily answered.

Coöperative cataloguing, as by the printing of cards, etc., is mainly a question of cost and of details of selection, which are interesting but cannot be profitably discussed here. Miss Prescott's description of "How books reach the shelves" gives some data for explaining why it often costs more to get a book to the shelf than it does to buy it, and it might be good economy to have the work done for both libraries at once, so far as possible.

There remains the printing of joint class lists, which appears to me to be the most practical and useful form of coöperation which the two libraries can make use of just at present. So far as the New York Public Library is concerned, I feel sure that it will be glad to join in such work for any class of books of which it has its catalogue and classification fairly complete. Such coöperative work would be useful, not only to the readers in each library, but also to those in many other libraries, and it does not seem probable that there would be much difficulty in coming to an agreement as to details.

The classification of the New York Public Library differs in some respects from that of Columbia, not merely in the theoretical scheme, but in the assignment of certain

books. In the New York Public Library, for example, an ordination sermon or the report of a private school will, in most cases, be placed on the shelves with the local history of the town, and not with theology or education, although they may be noted in the card catalogue of subjects under both heads—for the reason that the great majority of our readers wish to see such things in connection with questions relating to local history. For a similar reason, all books, pamphlets and reports relating to railroads are placed together, with proper sub-divisions, and are not scattered through the departments of engineering, finance, commerce, sociology and law, as they might be in a library having a different class of readers.

Such differences in classification as may exist would not present any serious obstacles, in most cases, to the preparation and publication of conjoint class lists. The plans of the new building for the New York Public Library have been prepared with reference to the need of quiet and special facilities for access to certain classes of books by serious students; and the re-arrangement and cataloguing of books which is now going on is being done with reference to these future plans. The interests of the teachers and students in the higher institutions of education of New York in general, and of Columbia University in particular, will be kept in view, and any suggestion from them will be carefully considered.

A specially valuable form of coöperation, for the benefit of the New York Public Library, would be that the expert advisers as to purchases for the Columbia Library in the different departments of history, literature, science and art—that is to say, the professors and teachers—should also make themselves acquainted with the resources and the deficiencies of the Public Library, each in his own field of work, and should advise this Library also as to books which it seems desirable that it should obtain.

JOHN S. BILLINGS

THE STUDY OF DRAMATIC LITERATURE

THE most obvious difficulty besetting all study of the drama is due to the fact that the art is far more complex than any of its sisters, since it demands for its highest enjoyment a three-fold excellence very rarely attainable—excellence in the play itself, excellence in the actors who perform it in the theatre, and excellence in the stage management (taking this last term in its broadest sense). Indeed, this triple ideal is so infrequently realized that many of those who accept the drama as the most noble and splendid of literary forms, have renounced all hope of seeing this treble excellence achieved and have accustomed themselves perforce to be content with the play alone, not set forth on the stage by actual actors, but read leisurely in the study.

Yet there is no need to prove that the results of this habit may be most unfortunate; and we could not call better witnesses than certain editions of Shakespeare's comedies and tragedies, in which we can discover no sign that the editor had any consciousness that he was dealing with the plays of the greatest dramatist of all time—with plays composed to be acted before the groundlings by the author himself and his companions. Indeed, this habit of considering the plays of Shakespeare and those of Sophocles as intended rather to be read than performed is far more dangerous than most of its victims are aware. It tends inevitably to a misleading neglect of the essential dramatic quality of the masterpieces of the dramaturgic art. It leads to the laying of undue stress upon the mere words of the dramatic poet and to an inadequate recognition of the solid and logical structure of the play itself. It tempts us to dwell rather on rhetorical beauties and on merely verbal felicities than on the framework of motive and character which must sustain a serious drama.

However unfortunate this tendency may be, none the

less is it easy to understand, when we recall the infrequent opportunity afforded us to behold the plays of the great dramatists of the past bodied forth on the stage. Probably not more than half a dozen Greek tragedies have ever been performed here in the United States, whether in the original or in translations, and probably less than half a dozen Latin comedies. Even of Shakespeare it is not easy to see on the stage more than eight or ten of the comedies and tragedies. In my own play-going career of thirty-odd years, I have had the chance of being present at the performance of twenty-eight of Shakespeare's thirty-seven plays; and the advice I am wont to give to all young students of the stage is to begin early to make a collection of Shakespearian performances, and never to let slip an occasion for adding to it, since an opportunity neglected may never return again. Of the plays of the other mighty Elizabethans only two have been presented in regular theatres here in New York within thirty years—Webster's *Duchess of Malfy* and Massinger's *New Way to Pay Old Debts*.

In the German capitals the court playhouses, and also the new subscription theatres described by Mr. William Archer in his Columbia lecture of last spring, keep alive a larger repertory than an American play-goer can hope to witness in his own country; and not only the student of Lessing and Schiller, but the student of Shakespeare and Molière, can profit by a visit to Vienna and to Berlin. In Paris both the Comédie-Française and the Odéon receive subventions from the state, in return for which they are bound to perform a specified number of the classics during the year. At the Odéon also, which is in the center of the Latin quarter, a series of special afternoon performances is arranged every winter, at which can be seen sequences of such plays, both French and foreign, as are likely to interest students of dramatic history—every piece being preceded by an explanatory lecture in which the play is de-

scribed, explained and discussed. These lecturers are some of them distinguished dramatic critics, such as M. Francisque Sarcey and M. Jules Lemaitre, and some of them professors of the University of France, such as M. René Doumic and M. Eugène Lintilhac.*

Pending the establishment here in New York of such a repertory theatre as Mr. William Archer advocated, the student of the drama attending Columbia University must needs make the best of such opportunities as are presented to him. And, however short these may be of the privileges available to a student in Paris or Vienna, they are far richer than those offered to the students at any other American university. As Lowell has put it tersely, "whatever place can draw together the greatest amount and the greatest variety of intellect and character, the most abundant elements of civilization, performs the best functions of a university." By the mere extent and great variety of its population, New York is able to supply material for the comparative study of dramatic literature more curious in many ways than that afforded in Paris or Vienna, superior as these are in certain other important points.

Not only do all the wandering stars of the theatrical firmament remain longer in the metropolis than in any other American city and display here more fully than elsewhere the full range of their repertory, but we have here the chief of the stock companies—one of which, the late Augustin Daly's, made a practice of annually reviving one or more of the dramatic masterpieces of the past. We have also an admirable German theatre, the intelligent manager of which, Herr Conried, keeps well abreast of the best that the modern German stage is achieving. In the lower quarters of the city there are to be discovered a Chinese theatre, an Italian theatre and three Yiddish theatres, no

* See M. Lintilhac's *Conférences dramatiques* (Paris: Ollendorff, 1898) and *Conférences faites aux matinées classiques du Théâtre National de l'Odéon* (Paris: Crémieux, 1891).

one of which is to be neglected by any one who is desirous of mastering the essential principles of the drama.

We have also various training schools for actors; and the chief of these, the American Academy of the Dramatic Arts, directed by Mr. Franklin H. Sargent, provides every winter two or three programs of unusual interest, such as the reproduction two years ago of an early English miracle-play and last year of a medieval French farce. It is hardly possible to over-estimate the advantage these reproductions have offered to any one striving to create in his own mind an exact image of what the primitive theatrical performances of our ancestors were like.

Few of us are aware how many opportunities are here offered to a serious student of the drama, and more especially of the modern drama. It has seemed to me worth while, therefore, to draw up the following list of the more important plays which were to be seen on the stage in New York during the college year of 1898-9:

SHAKESPEARE: *Romeo and Juliet*; *Othello*; *As You Like It*; *Julius Cæsar*; *Macbeth*; *Hamlet*; *Merchant of Venice*; *The Taming of the Shrew*.

SHERIDAN: *The School for Scandal*; *The Rivals*.

A. W. PINERO: *Trelawney of the Wells*; *The Second Mrs. Tanqueray*; *The Profligate*.

W. S. GILBERT: *Pygmalion and Galatea*.

H. A. JONES: *The Liars*; *The Silver King*.

T. W. ROBERTSON: *Ours*.

H. J. BYRON: *Our Boys*.

BRONSON HOWARD: *Aristocracy*; *The Banker's Daughter*; *Shenandoah*.

JOSEPH JEFFERSON: *Rip Van Winkle*.

JAMES A. HEARNE: *The Reverend Griffith Davenport*.

WILLIAM GILLETTE: *Secret Service*.

H. B. FRY: *Little Italy*.

DENMAN THOMPSON: *The Old Homestead*.

T. B. ALDRICH: *Mercedes*.

ANONYMOUS: *The True Farce of Master Peter Patelin* (in English).

MOLIÈRE: *Tartuffe* (in English).

SCRIBE: *Bataille de Dames* (in French).

OCTAVE FEUILLET: *The Romance of a Poor Young Man* (in English); *A Parisian Romance* (in English).

DUMAS, FILS: *The Lady of the Camelias* (in English); *Denise* (in English).

SARDOU: *Les Vieux Garçons* (in German); *Divorçons* (in English); *Madame Sans-Gêne* (in English).

MEILHAC AND HALÉVY: *Froufrou* (in English).

ROSTAND: *Cyrano de Bergerac* (in English and in German).

HENRI LAVEDAN: *Catherine* (in English).

LESSING: *Nathan der Weise* (in German).

GUTZKOW: *Uriel Acosta* (in German).

SCHILLER: *Wallenstein's Death* (in German).

SUDERMANN: *Heimat* (in English); *Die Ehre* (in German).

HAUPTMANN: *Fuhrmann Henschel*.

WILBRANDT: *Daughter of Fabricius*.

BLUMENTHAL AND KADELBURG: *Im Weissen Rössl* (in German and in English).

This list is intentionally incomplete and the selection of titles is somewhat arbitrary. But it will serve to show how the polyglot theatres of cosmopolitan New York can be of great advantage to the student of the drama, especially if his preference lies toward the later playwrights of France and of Germany.

BRANDER MATTHEWS

DORMAN B. EATON

IN the will of Dorman B. Eaton, Columbia University is named as the recipient of a bequest of \$100,000, payable on the death of Mr. Eaton's widow, to be held as a permanent fund for the endowment and maintenance of a professorship of municipal science and administration; and to Harvard University is left a like sum for a professorship of the science of government. In connection with the Harvard professorship, Mr. Eaton's will contains the following statement:

I do not attempt to prescribe the specific instruction to be given through this professorship; but I may say that I have endowed it, not only in the faith that it will be always filled by an able and patriotic citizen, zealously devoted to its purpose, but in the hope that, through its teaching, the great principles upon which our national constitution is based, and in conformity to which administration should be carried on, will be vindicated and strengthened; that the fit relation between parties and government will be made plain; that the obligations of the moral law and of patriotic endeavor in party politics and all official life will be persuasively expounded; that the just relations between public opinion, party opinion and individual independence will be set forth; that an effective influence will be exerted for making public administration and legislation in the United States worthy of the character and intelligence of their people; and that not only the salutary lessons of history will be presented, but that the most appropriate and effective means of practical wisdom, in our day, will be considered for preventing corruption and partisan despotism in politics and government, and for inducing and enabling the most worthy citizens to fairly exercise a controlling power in the republic. It seems to me that these lessons—and especially such as may be drawn from the history of the ancient Italian and Dutch republics and from that of England—have been by no means adequately expounded in the teachings of our political sciences.

In regard to the endowment given to Columbia, the will provides as follows:

The explanations which I have made as to the other professorship are largely applicable here; but, without attempting to prescribe the instruction to be given, I wish to add these words: The problem of municipal government is one of great difficulty and peril, and there is little in our early constitutions to aid in its solution. A true and safe municipal system is yet to be created in the United States. Nowhere is patriotic and wise leadership on such a subject more needed, or can it be more useful, than in the City of New York. To determine a definite sphere within which cities and villages shall substantially control their own affairs; to clearly mark the limits of coöperation between them and the states beyond this sphere; to provide the best methods of municipal administration; to create councils in cities and villages which shall, in substance, exercise their local authority and represent their public opinion rather than their party opinion; to greatly reduce the number and frequency of elections in municipalities; to prevent the control of their affairs by parties and factions, and to make good municipal government the ambi-

tion and endeavor of the worthiest citizens—these seem to me to be great problems of statesmanship, towards the solution of which I trust this professorship will largely contribute. Through it, I hope municipal wisdom, gathered from the most enlightened cities of other countries and from all the best governed municipalities of the union, will find effective expression.

In providing for the endowment of the latter professorship, there can be no doubt that Mr. Eaton had in mind the chair of administrative law established at Columbia in 1891, with which he was thoroughly familiar and in which he was greatly interested.

It has been remarked in a recent editorial article that there could be no more fitting time than the present to endow professorships to "vindicate and strengthen" the "great principles upon which our constitution is based"; "to provide the best method of municipal administration; to prevent the control of municipal affairs by parties and factions, and to make good municipal administration the ambition and endeavor of the worthiest citizens." With equal force it may be said that no individual could more fitly be commemorated by these endowments than Dorman B. Eaton; for the greater part of his life was devoted to the attainment of the objects which these professorships are intended to promote, and his final benefaction is, therefore, but the continuation of his life-work. That work was so fruitful in results as to render it impossible to mention here any but the most important. Among these, the first in chronological order was the enactment of the law creating the Metropolitan Board of Health for New York and Brooklyn, which was passed in 1866 (Laws 1866, Chapter 74), and which was the first statute enacted in this country providing for a municipal sanitary system. Up to that time there had been practically no organization which could properly be considered a health department, either in New York or elsewhere in the United States; and in consequence the city suffered to an appalling extent from cholera, small-pox and other diseases engendered and

propagated by filthy streets, over-crowded tenements and a complete lack of sanitary regulations. Acting for the Citizens' Association, Mr. Eaton prepared a bill which not only created a Health Board, but embodied the principles essential to any sound system of public sanitation and vested the Board with arbitrary powers of an extent and character until then unrecognized in this country, but absolutely essential to effective administration. Among Mr. Eaton's associates in the work were Charles O'Connor, William Curtis Noyes and other eminent lawyers; but it fell to him to draft the bill, and it was largely due to his personal exertions that it was finally passed and became a law. In March, 1866, the Metropolitan Board of Health was organized, with Mr. Eaton as its counsel, and a system of sanitary regulations was forthwith put into operation which had the immediate effect of greatly improving the physical condition of the city, of preventing the spread of contagious diseases and of largely reducing the rate of mortality. Great as were these results, they were only a part of what the passage of this act served to accomplish; for its enactment led to the adoption of similar laws for other cities, and its fundamental provisions are to-day embodied, not only in the charter of New York, but in the sanitary code of every city and town in the United States.

As soon as the new Health Board had been fairly established, Mr. Eaton devoted himself to the reform of the Fire Department, which up to that time had depended entirely upon volunteer service, and he prepared and aided largely in securing the enactment of the Charter of 1870, reorganizing the local government of the city (Laws 1870, Chapter 187). The features of this law which were especially the work of Mr. Eaton were the sections creating a paid Fire Department, in place of a wholly inadequate volunteer service, and a Department of Docks, there having been up to that time no department especially charged with the care of the water front. Mr. Eaton next under-

took the reorganization of the Police Justices Courts, which, under a system of electing the justices, had become a public scandal. Mr. Eaton's act abolished the elective system and provided for the appointment of police justices by the Mayor, subject to confirmation by the Board of Aldermen, for a term of ten years, and required them to devote their whole time to the duties of the office. The act provided in the most complete manner for a judicial system, which was not only greatly in advance of that which preceded it but which it would be difficult to improve upon. (Laws 1873, Chapter 538.)

The next reform to which Mr. Eaton devoted himself was that of the civil service, and he was among the first to encounter the storm of ridicule and contumely which it at once evoked. This he met with the quiet courage which characterized him; and when George William Curtis resigned in despair the chairmanship of the Advisory Civil Service Board appointed by President Grant, a successor willing to assume the apparently hopeless task was found in Mr. Eaton. As events proved, however, the politicians controlled the administration; and it was not until the election of President Hayes that the principles of civil service reform had a true friend at the head of the administration. He re-appointed Mr. Eaton chairman of the commission and sent him to England, though at his private expense, to study the development and working of civil service reform in that country. As the result of his observation and study, which was of the most extensive and thorough character, Mr. Eaton published a volume which Mr. Schurz declares to be the most valuable contribution to the literature of civil service reform. In 1882 came the opportunity of the reformers. Even the politicians had then become convinced that some measure of reform in the civil service was necessary. A number of bills were prepared by congressional committees and others. Mr. Eaton was requested to prepare a bill and did so, with the result that his draft was

considered so immeasurably the best that it was accepted in preference to all others. It was introduced in Congress, where it was known as the "Fenton Act," and subsequently became a law. Mr. Eaton also drew up the civil service law of this state, which has served as the basis for similar laws in almost all the other states.

Speaking of the remarkable constructive capacity shown by Mr. Eaton in drafting these statutes, Mr. Schurz said of him that he might be considered "the legislative architect of civil service reform"; and, as has already been shown, his creative power was exercised to almost, if not quite, as great an extent in the cause of municipal reform. Mr. Eaton's last literary work, *The Government of Municipalities*, published only a few months before his death by the Columbia University Press, bears much the same relation to municipal reform that his earlier volume did to the civil service. It contains not only a statement of the author's conclusions as to the best methods of municipal administration, based upon years of reading and investigation both at home and abroad, but it is a compendium of information upon the subject; and his theories are supported by a mass of facts and authorities which render the work a veritable storehouse to the future student of municipal affairs. It was largely for this purpose that the volume, which absorbed Mr. Eaton's most mature years and deliberate thought, was prepared; and his motive in writing it was identical with that which led him to endow this professorship at Columbia. Not content with having expended a great part of his life and the most indefatigable industry in efforts to benefit his country and his countrymen, in which he evinced an entire disregard of selfish or personal considerations, he has sought in the disposition of his property to further the realization of his ideals through the aid of education.

As an educator of public opinion Mr. Eaton has had few equals; for it must be remembered that every one of the

important statues which he brought forward represented a distinctly new idea, and that public opinion had to be educated up to the point of supporting it before it could become a law. That he did so educate opinion is proved by the enactment of these laws. In many other ways tending to the public good his influence was exerted in a less tangible, but not less real, manner ; nor can it be doubted that his personal example had its effect in developing that higher standard of citizenship which has found its expression in late years in numerous civic movements and which these professorships are intended to further develop. Few men have so impressed themselves upon the statute law of their country as Mr. Eaton has done, and as evidence of his broad and wise statesmanship these enactments are his enduring memorial ; but it remained for him after his death, by the terms of his will, to give expression to the profound sense of public duty which governed all his public acts. In associating himself with the University, as he has done in endowing the chair which will doubtless bear his name, Dorman B. Eaton has bequeathed to it a legacy which he has enriched by his personal character and by the record of a life which proved him to be, in the truest sense of the words, "an able and patriotic citizen."

JOHN B. PINE

A HISTORY OF COLUMBIA UNIVERSITY

TO the first volume of *Universities and Their Sons** Professor Van Amringe has contributed an historical account of Columbia University. It extends to 158 pages and is divided into three parts—the first relating to King's College, the second to Columbia College down to the installation of President Seth Low, and the third to Columbia University as it exists to-day. This is the fullest

* *Universities and Their Sons*. Edited by J. L. Chamberlain, Ex-President of Bowdoin College. 3 vols. Boston, the R. Herndon Co., 1898.

and the most accurate history of our University that has yet been written, and it is a storehouse of well-ordered information with regard to everything which concerns the external and official side of Columbia's development. Professor Van Amringe has performed a valuable service in getting together so many details concerning the early history of the institution, and in setting them forth so lucidly and in so concise and readable a manner. He has printed in full many of the documents of the pre-Revolutionary period, and these are often as quaint as the customs and usages which they describe.

It is rather amusing, for instance, to learn that at the opening of the College in 1754, the president, Dr. Johnson, constituted the entire faculty, and that in 1755 the president's son, William, became the second officer of instruction. How satisfactorily their functions were performed is shown by an item in the *New York Gazette* of the same year, where it is stated that the trustees visited and examined the students of the College and were "mighty well pleased" with their proficiency. Other bits of contemporary color are found in the drinking of his Majesty's health at the laying of the College corner-stone; in the acceptance of the presidency by Dr. Johnson, on condition "that he be allowed to retire to some place of safety out of town when the smallpox prevailed;" in the fact that the president was absent from the city for an entire year owing to this specified cause; that the students were in 1761 forbidden to have meat at their suppers; that a committee of the Governors of the College established "rules for dieting;" and that the weekly rates for "dieting" were eleven shillings a week. Not without interest, also, is the bill of fare for each day of the week, officially promulgated by this culinary triumvirate. Among the dishes approved by them are to be found for dinner "Corn'd Beef, Pease Porridge and Mutton Pye;" and the supper was always to include "the Remainder of the Din-

ner." Discipline in those days was a matter of serious concern to the governing body, as the regulations show. There is a record of punishment inflicted upon one student "for having come thro' a Hole in the College fence at twelve o'clock at Night," and upon three other students who were evidently unaware of the existence of the Hole and who had "gone over the College fence . . . to bathe." Another youth refused to open his Door when repeatedly called upon by the President, and "caused four Doors to be broke open before he could be laid hold of." There is a further note in regard to this gentleman, as follows: "N. B. Found at last in the Room opposite to his own, where he had hid himself, having opened the Door with a false key." Still another reprobate was condemned to translate No. 316 of the *Spectator* into Latin; while a person who is darkly mentioned as "D," "for stealing 8 sheets of Paper and a Penknife, was reprimanded in the College Hall before all the students; and after having his Gown stripped off by the Porter he was ordered to kneel down and read a paper containing an Acknowledgment for his Crime, expressing much sorrow for it, and promising Amendment for the Future. He was then forbidden to wear his Gown or Cap for one Week."

One dwells the more readily upon these quaint details, because they are what is needed more than anything else in a history of our University, in order to bring out its personal element and its human side. As Professor Van Amringe's narrative advances, we find less and less information of this sort and the story is confined more closely to the officially academic growth of the institution. This, we think, is greatly to be regretted. Owing to the fact that Columbia, to the casual observer, now and in the past seems to have had comparatively little of what is popularly known as "college life," there is all the greater need that its historian should bring out strongly, what is indeed the truth, that her life has in reality always been intensely

vigorous and individual. The old College had for its undergraduates an atmosphere and an influence which were felt and appreciated by all of those who underwent her training; and from the earliest days down to the present time the personal equation has been one that could never be neglected in an estimate of what she did in disciplining the mind and taste, and in molding effectively the character.

We could wish that something had been said of the personality of the men who in this narrative too often figure as names and nothing more. For the greatness of a university and its power to stimulate and inspire do not depend first of all upon bricks and mortar, upon well ordered curriculums, and upon the material equipment, the books, the apparatus and the smoothness of the administrative machinery. They depend in their last analysis upon the men who do the work, who guide and excite and stir the minds of those who carry away in the end a far less vivid impression of their studies than of the personal influence of their instructors. The architectural beauty of Oxford, to be sure, is in itself an inspiration; yet tower and ivied wall and lawn and grove and quadrangle would after all have little meaning, were not the sight of them inseparably blended with a thousand recollections of the men who lived among them and thereby made them doubly memorable. And so is it also, in looking over the history of Columbia's past, studded as it is with associations which by the alumnus are never to be forgotten, and which ought to vivify and mellow the story of one of the greatest universities of the land.

No history of Columbia will ever be complete which does not draw for us minutely and with sympathy the figure of the fine old Tory president whom Hamilton and his fellow-students chased from the College grounds because of his loyalty to the British king. No history of Columbia will have been fully told until it shall have included a graphic sketch of the Olympian Anthon, his gouty leg

swathed in bandages, supported into his lecture room with the mien of a Roman senator, and sitting on his throne-like elevation while the most audacious student trembled at his frown. There are the long line of presidents and the illustrious roll of scholars who made Columbia, even while it was a small and impecunious institution, one that kept bright the lamp of learning down through all the century; and there is also the record of those alumni who as undergraduates won their first distinction and received their early discipline in Columbia's halls. The lives, the personality, and even the oddities and the eccentricities of these men should be woven into the completed narrative of our University, because of it they form a vital and inseparable part, and because without a frank consideration of the personal and social element, a great university can have, to those who regard it from without, no more significance and no more profound importance than a great cattle-ranch or a great boiler-factory. Happily, it is understood that when the series of volumes now before us shall have been completed in their present form, a new edition is to be prepared that shall contain some added chapters on Columbia's social life—chapters that are also to be written by the accomplished author of this official history, than whom there lives no man more deeply versed in Columbia's traditions, more loyal to her interests, or more able to set forth the entire story with tact, discretion and instinctive sympathy.

The history is lavishly supplied with illustrations, comprising portraits, architectural views, fac-similes and diagrams, all of them exceedingly well executed. President Low is to be congratulated upon the fidelity of his likeness with which the history is introduced, and which forms a pleasing contrast to the painful portrait of President Eliot and the uncanny simulacrum of Dr. Patton.

HARRY THURSTON PECK

PROFESSOR THOMAS EGLESTON

IT is with much regret that we have to record the death, on January 15, 1900, of Professor Thomas Egleston, the founder of the School of Mines, and for more than thirty years Professor of Mineralogy and Metallurgy in Columbia University.

Professor Egleston was born in New York in 1832, of an old and prominent Massachusetts family, two of his ancestors, Generals Egleston and Patterson, having been distinguished Revolutionary officers. At an early age he became interested in scientific subjects, and after graduating from Yale College in 1854 he worked for some months as assistant in the laboratory of Benjamin Silliman, Jr. His professional education, however, was mainly obtained in Paris, where he spent several years, studying first at the Jardin des Plantes and later, with very great energy and indefatigable industry, at the École des Mines, where he graduated with honors in 1860. During his after life, he always spoke in the warmest terms of the kindness with which he had been treated in the École. Every laboratory was thrown open to him and he became the personal friend of the various professors there, acting as assistant to many of them in turn and receiving from them introductions to scientific men all over Europe.

He returned to America in 1861, and was soon appointed to take charge of the mineral collections and the laboratory at the Smithsonian Institution, Washington, which was not in war times a very favorable field for a brilliant mineralogist. After staying there two years, he came to New York and founded the School of Mines.

It was in March, 1863, that Professor Egleston published a plan for a school of mines and metallurgy in New York City, embodying a three-year course for the degree of engineer of mines, and including instruction,



THOMAS EGLESTON, E.M., LL.D.



theoretical and practical, in all branches of science relating to these subjects. He first consulted Mr. Peter Cooper with regard to the propriety of establishing the school of mines in Cooper Institute; but, after some discussion, it was decided that, as Professor Egleston's plan proposed to give a very comprehensive education of a very high grade, it was not compatible with the general plan of the Cooper Union, which contemplates giving a moderate amount of education to young men who are so situated that they cannot attend the universities. Professor Egleston finally succeeded in interesting some of the trustees of Columbia College in his plan; and in April, 1863, a committee, consisting of Mr. William Betts, Mr. George T. Strong and Dr. John Torrey, was appointed to consider the expediency of establishing a school of mines and metallurgy as part of the graduate instruction of the College.

On the 4th of May of the same year, the committee reported in favor of establishing such a school on a very moderate scale, the finances of the College at that time making it impossible for the trustees to offer salaries or incur other expenses of any consequence. The recommendations of the committee were approved and the matter was referred back to the committee, to report the details of the proposed organization, to nominate professors and instructors in the several departments of the School, and to report what portion of the College building could be conveniently set apart for its use.

On December 21, 1863, the committee made its final report, which was accepted; the necessary resolutions were adopted for the establishment of the School, and Professor Egleston was appointed professor of mineralogy and metallurgy. Soon afterwards, General Francis L. Vinton, a graduate of West Point and a fellow student of Professor Egleston at the *École des Mines*, was appointed professor of mining engineering; later Dr. C. F. Chandler, professor of chemistry at Union College, was ap-

pointed professor of chemistry, at Professor Egleston's request; and arrangements were made for opening the School on the 15th of November, 1864. As the College was not in a position to meet the expense of fitting up the rooms in the basement of the College as laboratories, Professor Egleston interested a number of gentlemen in his plan and secured about \$5,000 to meet the necessary expense. Laboratory accommodations were provided for twelve students—sufficient, it was supposed, for all who would be likely to apply for admission during the first year. Rooms were also provided for mineralogy and metallurgy, and the College appropriated \$500 for fitting them up. Valuable collections of minerals were presented to the new School by Mr. George T. Strong, by Professor Henry, of the Smithsonian Institution, and by Mr. Gouverneur Kemble. Special interest was manifested in the undertaking by Dr. F. A. P. Barnard, who had just at this time succeeded Dr. Charles King as president of the College. Dr. Barnard was specially interested in scientific subjects, having previously filled the chair of physics and chemistry at the University of Alabama, and he did everything in his power to further the enterprise.

In order to give additional strength to the new School, the trustees appointed a special committee of seven of their number to take immediate charge of its affairs; and they appointed, as associate members of this committee, the gentlemen, not members of the board of trustees, who had taken so great an interest in establishing the School and who had furnished the necessary means. These gentlemen were: Dr. Cornelius R. Agnew, George C. Anthon, Samuel W. Bridgman, Lewis L. Delafield, Franklin H. Delano, William E. Dodge, Jr., Jacob P. G. Foster, Nathaniel P. Hosack, Robert L. Kennedy, Baron Robert Ostensacken, Howard Potter, Temple Prime, James Renwick, Otis D. Swan, Lucius Tuckerman and George C. Ward.

On the 15th of November, 1864, the School opened, and twenty-four students presented themselves on the first day. Carpenters and gas-fitters were called in at once to fit up more work-tables in the laboratories; but the students came faster than the mechanics could provide places for them, and altogether forty-seven students attended the School during the first winter.

As soon as the students really made their appearance and it was evident that work must be done to give them proper instruction, several of the professors in the College volunteered to assist in the work, and their services were very gladly accepted. Professor Charles A. Joy offered to give instruction in chemistry, taking first organic chemistry and subsequently the whole of general chemistry. Professor William G. Peck took mechanics and mining surveying, Professor J. H. Van Amringe mathematics, and Professor Ogden N. Rood physics. As it was soon found that a knowledge of French and German was absolutely necessary to enable the students to make use of the best text-books, Professor Joy volunteered to teach German and Professor Vinton to teach French; and, as there was no professor of geology, Professor Chandler lectured on geology, in addition to analytical and applied chemistry and assaying.

In providing accommodations for the large number of students who applied for admission, Professors Egleston, Vinton and Chandler made themselves personally liable for about \$6,000; and, although the trustees of the College had expressly provided that they should not be called upon to make any appropriations for the new School, they came forward with enthusiasm and appropriated a sufficient amount to cover all expenses for the first year.

As it became evident that the basement of the old College building would be entirely inadequate for the rapidly growing School of Mines, the trustees sought more ample accommodations. Fortunately, just at this

time, some buildings on the College grounds, which had been rented as a wall-paper factory, became vacant. They were assigned to the School of Mines and \$10,000 was appropriated to put them in proper order. The four floors and the basement were equipped as assay laboratory, qualitative laboratory, quantitative laboratory, mineralogical museum and drawing academy. Accommodations were provided for seventy-two students; but eighty-nine actually attended, and the College authorities expended in all about \$30,000 during the second year.

As it was now clear that the School of Mines had come to stay and that it was necessary to provide more extended accommodations, the trustees decided to authorize the erection of a special building on Fourth Avenue. They also appointed Dr. John S. Newberry to the chair of geology. The total expenditures for the third year were about \$70,000. From that time the School of Mines continued to grow in numbers and usefulness. It was soon found desirable to add a fourth year, which was at first called the preparatory year, lest a four-year course might frighten students away, but subsequently the name "preparatory" was dropped. Soon after the School was opened, it was decided to add parallel courses to the original course in mining engineering: first a course in metallurgy for metallurgical engineers, then a course in analytical and applied chemistry, then others in civil engineering, geology, palæontology, and later in architecture, electrical engineering, sanitary engineering and mechanical engineering.

It would be out of place here to develop any further the history of the School of Mines, but justice could not have been done to the memory of Dr. Egleston without giving some account of the great work which he originated and to which he devoted the best energies of his life. It must have been a never-ending source of satisfaction to him that this great educational enterprise which he created should have attained, within his own life-time, so great a degree of usefulness.

After the School of Mines had become an assured success, Professor Egleston's life was largely devoted to the arduous duties of his double chair of metallurgy and mineralogy, both of which subjects he taught without intermission until, in 1897, failing health compelled him to desist from active teaching. During all these years he was indefatigable in the pursuit of information bearing upon those and kindred subjects. He was one of the founders of the American Institute of Mining Engineers, was its vice-president for three years, and was in 1886 elected president; and in its transactions are to be found scores of articles by him, many of them embodying the results of most laborious investigations. Until the last few years of his life he spent every summer, either in Europe or in the West, studying various problems in metallurgy and kindred subjects, visiting works, gathering specimens and pursuing his researches with a zeal and enthusiasm which will never be forgotten by those who had the good fortune to witness them.

He was also one of the founders of the American Societies of Mechanical Engineers and of Civil Engineers, and of the Meteorological Society. He was, for many years, vice-president of the New York Academy of Sciences and was a member of the Society of Civil Engineers and of the English Iron and Steel Institute. In the transactions of all these societies are to be found articles by Professor Egleston upon a wide range of scientific subjects. His more important publications are two large volumes on the metallurgy of gold and silver and of mercury in the United States, which appeared in 1887 and 1890, his lectures on metallurgy, his mineralogical and metallurgical tables, and similar works, intended more particularly for the use of his classes in the School of Mines.

His professional services were frequently called for by various governments. In 1868 he was appointed on a United States commission to examine coast fortifications.

He was also on the government survey of the Union Pacific Railroad, and performed mineralogical work for the Japanese and the Russian governments. Nor was he without suitable recognition of the value of his scientific attainments, both at home and abroad. In 1874 he received the degree of Ph.D. from Princeton and that of LL.D. from Trinity; and in 1890 he received the very unusual compliment, for a foreigner, of being appointed by the French government a Chevalier of the Legion of Honor.

Besides his wide and varied interests in these particular scientific pursuits, to which his life was mainly devoted, Professor Eggleston was remarkable, especially during the later years of his life, for the part which he played in various activities of interest to the public at large. To his energy and perseverance, as well as to his refined taste, are due the erection, by public subscription, of two of the most beautiful monuments in the city—the one erected over the grave of Audubon, in the Trinity cemetery, and the other, a statue-bust to the great metallurgist, Alexander Holley, standing in Washington Square. He was much interested in efforts to improve the conditions of life among the poor; and by his personal exertions, and largely at his own expense, he founded and for many years supported, in one of the poorer districts of the city, a New England diet kitchen, from which as a center he hoped that a scientific knowledge of methods of preparing food might be circulated among the surrounding tenement houses.

But of more importance than these and similar interests, and second only to his labors in the School of Mines, was his earnest devotion to the work, both religious and educational, of the church. For nearly thirty years he was the vice-president of the City Mission. He was a trustee of the General Theological Seminary and for twenty-two years a member of the corporation of Trinity Church, taking a most active part in the great responsibilities attached to that position. He was always an ardent and de-

voted churchman ; and during the latter part of his life, after failing health had deprived him of the power of continuing regularly his scientific work, he spent more and more time, and took more and more pleasure, in identifying himself with various branches of the work of that great parish. He was particularly interested in the parochial schools maintained by Trinity among the poorer classes of the city ; and the good work that was done in these and in other lines of philanthropy, as founded and supported by the corporation, was a source of endless satisfaction to him.

Before closing this brief sketch, it may be worth while to say a word about Professor Egleston's personal characteristics. He was not a strong man physically, his health having been permanently injured by his exertions in his student days at New Haven and, especially, at Paris. This was so much the case that, certainly for the last twenty years of his life and probably for some time previous, he was almost constantly in poor health and under a doctor's care. In spite of this, up to the last year or two of his work at the School of Mines, he always gave the appearance of the greatest vigor, and was full of energy and alertness. He had a strong-set, sturdy frame ; and his keen, clear features, with piercing dark eyes, combined with his quick, vigorous walk and erect carriage to give quite a misleading picture of his real physical condition.

So also of his manner. Although one of the gentlest, kindest, most warm-hearted and sympathetic of men, for some reason or another he often gave to the casual observer the impression of being very stern and strict ; and to one who knew him well, it would have been amusing, had it not been sad, to observe the way in which he was regarded by his students. During the later years, when the classes were large, he was rarely brought into close, personal relationship with any excepting the two or three whom he selected as his assistants ; and whether it was due to his quick, sharp, incisive delivery, or to his rather

positive, nervous, epigrammatic style, or to the difficulty of his main subject, metallurgy, or to the reported severity of his examinations, the fact remains that the average student of the School of Mines regarded him as one of the most severe members of the Faculty. Instead of this, he was a man simply hungering for affection and, to any one who had broken through the thin crust of his reserve, a most charming companion and a most devoted friend.

It was the privilege of one of the writers, while a student, to accompany Professor Egleston on two trips to Europe, and in that way to get an insight into his real character vouchsafed to but few. The first of these occasions was in the summer vacation of 1882, when he had just completed his second year in the School of Mines; and, while he had some acquaintance with Dr. Egleston outside of the lecture room, it was with considerable trepidation that he prepared for a three months' excursion with one so generally regarded by his classmates as a brilliant but exacting taskmaster. This feeling continued for about a week, during which Dr. Egleston was evidently trying to find out whether his companion was good for anything or not; but after that, until the day of his death, no friend, no relative could have been more affectionate and true.

Next to his warm heart and unvarying kindness the chief impression left by Professor Egleston on this trip was that of his indefatigable industry and of the conscientious energy with which he pursued the task before him, in spite of every obstacle. During the vacation of 1882 he went to Europe in order to study some problems in zinc metallurgy; and, starting at Liège, in Belgium, he and the writer visited and inspected with great care, in less than three months, almost, if not quite, all the important zinc works in Belgium, Germany, Bohemia and France, besides going through lead, silver, copper, steel and other metallurgical works in the chief mining districts of the continent. A trip like this would have taxed

the energies of a powerful, vigorous man; and yet not a day during the whole summer was he free from pain, while time and time again, as he would start out for a long, laborious excursion in the morning, it would seem almost impossible for him to get through the day without collapse. No argument and no persuasion would prevail. He had a certain amount of work to do each day, and do it he would; and, no matter how ill he was, when the works were reached, his keen, vigorous mind would assert itself. He would go through them from one end to the other, chatting with a stupid guide, or with an intelligent but intentionally non-communicative official, as the case might be; and his quick eye would take in at a glance detail after detail in the various departments traversed, all of which would be duly recorded in elaborate note-books, with drawings and measurements, on the table of the nearest inn, directly after leaving the establishment. His information on every branch of his two main subjects, mineralogy and metallurgy, was immense, his enthusiasm was contagious, and a close acquaintance with him was, of itself, a liberal scientific education.

The experiences upon the trip just described were, to a great extent, repeated two years later, just after the writer's graduation in 1884. The subjects to be studied this time comprised various processes in the manufacture of steel; and for months beforehand a delightful route had been planned out, which should start in the south of France, at Lyons, and include the Bilbao district in Spain, finishing with the Black Country in England, where the new process of basic Bessemer was just being introduced. Unfortunately, an outbreak of cholera in the south of Europe and Professor Egleston's ill health prevented the completion of more than the last portion of the proposed work. But, during the month or so that we spent in England together, the same qualities of kindness and gentleness to his associate and of absolutely unsparing devotion to his

own work combined to make the experience a memorable one. It is a curious little point, as showing how keen Dr. Egleston was upon his work, when on business bent, and how little he would allow his attention to sway from the object which he had in view, that although he had frequently been in England for months at a time, and although he had been for years passionately devoted to the church and to the church ceremonies and ritual, he had never, until the writer insisted one day on spending the next Sunday at York, found the leisure to attend a service in, or even, so far as can be remembered, to visit, an English cathedral. In after years, he would often refer to the pleasure which he had experienced that month at York and Durham, and to the lesson which it gave him of combining some small amount of outside pleasure with his labor.

It is a question for members of his own profession to settle, as to whether the practical side of Professor Egleston's character was developed as highly as the theoretical, and therefore, whether, in such a practical science as that of metallurgy—which, as he used often to impress upon his students, was the “art of making money out of ores”—his abilities, great as they were, and his industry and energy have left as deep an impress as those of men far less gifted naturally and with far less devotion to science. Dr. Egleston, however, was fortunate above all others in having lived to see the infant School of Mines, which he started so modestly in the basement of the old asylum in 49th Street, develop into a great and important department of Columbia University; and by its influence upon the University itself, as well as by its own splendid accomplishment, exert an enormous influence for good upon the whole educational system of the country.

C. F. CHANDLER AND C. E. PELLEW

EDITORIALS

There are many indications that the American people, especially those in the great cities, are beginning to discover the value and necessity of what, for lack of a better name, we may call public

**The Morningside
Acropolis**

art. That is to say, they are beginning to realize the artistic dreariness of the aspect of American cities, the lack of nobility in the planning, design and setting of streets, squares, monuments and public buildings of all sorts, and the absence of those innumerable minor embellishments which adorn the cities of the Old World and impart to them such a fascination for American visitors. There is no doubt that in this artistic awakening the Chicago and Omaha Expositions, with their revelations of architectural and sculptural beauty, have played an important part, by acquainting a million or two of people with the existence and possibilities of artistic effects of which they had not even dreamed. In our own city this awakening has been stimulated by the intelligent activity of the various art societies which have been organized in recent years; and the extraordinarily successful "Dewey" Arch—the product of but little over two months' work by the associated architect and sculptors who gave it being—and the increasing certainty of its perpetuation in marble are evidences of the reality and sincerity of the newly roused interest in municipal embellishment.

Every such artistic achievement lends force to any movement for the advancement of art. The public taste grows by what it feeds on; and as the city grows richer in beautiful buildings, its citizens will become more exacting in their demands for its artistic improvement. A fine building is a splendid object-lesson. From this point of view, the growing architectural beauty of the Morningside Heights is deeply significant. The region about Columbia University is becoming a sort of Acropolis, with its group of educational buildings, the Grant mausoleum, the St. Luke's Hospital and the slowly-rising fabric of the Cathedral of St. John the Divine. In the whole group there is, and is likely to be, nothing finer than the really magnificent approach to this University, with its esplanade, steps, terraces, balustrades and colossal vases, the whole crowned by the white colonnade and

dome of the Library. How many who hurriedly pass up and down that superb flight of steps and traverse the handsomely paved esplanade at its foot pause to take in the beauty of the picture, or reflect what dignity and splendor it imparts to the whole region about it? There is nothing like it in the country, unless it be the approach to the Capitol at Washington. It is rare, though it is to be hoped it may be more common in the future, to find a board of trustees so far-sighted in their recognition of the value of material beauty that they are willing to invest liberally in such architectural embellishments, which really, in the end, make as large a return of interest, both to the institution they adorn and to the community it serves, as could be expected from any other form of investment.

The permanent security of this embellishment and its final value will depend in large measure upon the final disposition of the now vacant property on the south side of 116th Street. The erection upon it of commonplace or ugly buildings or of lofty structures would tend greatly to diminish the beauty and effectiveness of the present approach to the University. Were this property within the control of the University, it would be capable of an architectural treatment and development which would enhance the value of the esplanade and frontage opposite it, as the latter would add dignity to whatever worthy architectural design faced it on the south side. There are possibilities of great and beautiful results, beneficial to the whole neighborhood, in this suggestion. Would that it might appeal to some munificent and public-spirited friend of Columbia and of this city!

How many users of the Library appreciate the marvelous beauty of its interior? The Reading Room is one of the noblest and most impressive halls in the country, and the Law Library is a palatial apartment. The Avery Library,

A Beautiful Building though overcrowded, is a room of great beauty and full of the atmosphere of book-splendor. Familiar use often dulls the edge of appreciation; but it is likely that the attractiveness of the different parts of the Library has, without our knowing it, so stimulated the enjoyment of these libraries as materially to increase their use. In a recent vote

by the subscribers to a Boston architectural publication which has a wide circulation, as to the "ten most beautiful buildings in the United States" the Columbia Library received 70 per cent. of the suffrages for a place on the list. It is a real privilege to pursue one's studies in such an environment. The officers of the department of architecture testify to a palpable advance in the quality of the work done in the school and a change for the better in its whole atmosphere and spirit, since its work has been done under the new conditions and beautiful environment of the present quarters.

The generous gift of \$100,000 to endow the professorship of psychology, made by Mr. John D. Rockefeller and announced at the January meeting of the Trustees, calls attention to the fact that few gifts are so useful to a large and rapidly growing university as those which provide for support, in part at least, of the teaching staff. To be sure, a gift of this kind does not provide so visible a monument as one given for the erection of a building; but in almost every case a new building, unless provided for by adequate endowment, is a source of added expense to the institution to which it is given. On the other hand, funds the income of which may be used for the payment of the salaries of professors set free an equal amount of money, which it is naturally the part of wisdom to expend in developing the resources of the teaching force still further.

The department of psychology, which has been the particular object of Mr. Rockefeller's generosity, has been particularly successful at Columbia. It came into existence as a prominent feature of the organization of the entire work in philosophy and related subjects, which was undertaken in 1888-9. In developing the department, Professor Cattell, in whose charge it has been from the first, has held steadily to the policy of making it in all respects representative of the best methods of modern research in psychology, while binding it in closest sympathy with the work in philosophy, in ethics and in education. The result has been a strong, well-rounded department, which has been steadily increasing its usefulness to the cause of science and to

the cause of education, and one from which still greater results may be expected in the future. Mr. Rockefeller's gift to this particular department is, therefore, especially welcome; and it is to be hoped that it may serve as a precedent to encourage others to give funds for the endowment of other chairs.

The appointment by the Trustees of a "Committee on Dormitories," for the purpose of encouraging the building of dormitories in the vicinity of the University and of giving the official sanction of the corporation to such as shall conform to the regulations established by the committee, amounts to a declaration of policy on a very important subject. As such, it emphasizes the action taken a year ago by the Trustees in preparing plans and setting apart sites for dormitories upon the Green, and indicates that the Board is fully alive to the urgent need of providing residences for students, whether in the form of buildings presented to the University as gifts or erected by private capital as business investments.

The former alternative is recognizedly the more desirable, as affording the ideal college dormitory and also as providing the University with a new source of income, but "outside dormitories" are none the less needed. It is greatly to be hoped that private capital may now be forthcoming for the purpose, sufficient not only for the erection of the dormitory which it is proposed to build at the corner of Amsterdam Avenue and 116th Street, and which is understood to be well assured, but for others of like character. The number of students boarding in the immediate neighborhood of the University at the present time is more than sufficient to fill several such buildings; and the existence of dormitories will unquestionably tend to increase the demand, by attracting from a distance students who are now deterred from coming to Columbia. Under existing conditions, and still more under conditions likely to develop in the near future, it is practically certain that dormitories upon Morningside Heights will prove as good an investment as they have done in either Cambridge or New Haven, especially if placed under the supervision of the University and conducted in such a manner as to

justify the authorities in calling attention to them in official publications as desirable residences for students.

In furtherance of the plan proposed by the Trustees for building the first story of University Hall, as announced in the last number of the *QUARTERLY*, the Committee on the Fund for the

Alumni Memorial Hall

Alumni Memorial Hall communicated with all the subscribers to the fund and obtained the assent of a very large proportion of the number, the replies indicating that the project met with universal approval. The Committee have accordingly placed at the disposal of the Trustees the sum already raised, amounting, with accrued interest to about \$65,000, leaving the sum of \$60,000 to be raised; and they will soon issue a circular to the alumni generally, informing them of the plan and asking for further subscriptions. Two graduates have each offered to give \$1,000 out of every \$10,000 that is subscribed hereafter up to a total of \$60,000. Another subscription of \$1,000 is pledged to complete the first \$100,000 of this fund, so that \$13,000 of the requisite amount is already assured if the balance of \$47,000 is subscribed. It is hoped that this appeal will reach a large number who are disposed to contribute but who have not yet done so, either from the belief that the undertaking was uncertain of accomplishment or from a reluctance to give in small sums.

That an Alumni Hall will be built is now an assured fact, and work will be commenced during the coming summer, if the additional amount needed for the first story, \$60,000, can be secured by Commencement. The first ground for hesitation has therefore been removed; and the second should not exist, for the committee have repeatedly stated that all subscriptions, of whatever amount, will be welcome, and that it is their especial desire that every graduate shall contribute something to the Hall in which he is to enjoy a proprietary interest and sense of possession. It is probably not an exaggeration to say that not one-fifth of the graduates of the College, not to speak of the other schools, have as yet subscribed anything to the fund. It is to the remaining four-fifths that the committee now look for assistance and it is certainly not unreasonable to expect that they will at least double the amount of the fund.

By recent action of the authorities concerned, Barnard College becomes, more fully than hitherto, an integral part of Columbia University. In the next number of the *QUARTERLY* we hope to

**Reorganization of
Barnard College** present a somewhat detailed account of the development of the College; here we content ourselves with a very brief description of the new arrangement.

Barnard College will retain its distinct corporate organization and its Trustees will continue to provide for its financial support, it being distinctly understood that the University incurs no obligation for the maintenance of the College. The President of the University, however, will be *ex-officio* President of Barnard College and one of its Trustees. He will have the general supervision and direction of its educational interests, just as he already has of the other schools of the University. The internal administration will be in the hands of a Dean—Professor Robinson has been appointed *ad interim*—who is to represent the College in the University Council. A new Faculty is to be created, which may include women as well as men, and will consist of the President, Dean and all professors of the University who give instruction at Barnard. The College will provide for and maintain such officers of instruction as may, from time to time, be agreed upon. These officers will be nominated by the Dean, with the approval of the Trustees and the President, and will be appointed and re-appointed by the University, according to its custom. The standing of these officers will be the same in all respects as that of officers of like grade in the University. For all services rendered in the University by members of the Barnard Faculty an equivalent amount of service is to be rendered in Barnard College by University officers of like grade.

By July 1, 1904, it is expected that arrangements will have been made whereby all instruction for women, leading to the degree of Bachelor of Arts, will be given at Barnard College. The University will confer the degree as hitherto, and the degree is to be maintained as of equal value with that conferred upon the graduates of Columbia College. When Barnard has adequately provided for its undergraduate work, it will, as its means allow, establish additional professorships in the University, upon foundations providing for courses which shall be open to men and women, in order that the opportunities for higher education may

be enlarged for all attending the University. The University is to admit women who have taken their first degree, upon the same terms as men, to candidacy for a higher degree in the Schools of Political Science, Philosophy and Pure Science.

It is with great regret that we chronicle the resignation of Mrs. Putnam as Dean of Barnard College. Her many friends had observed with apprehension the impairment of her health, but had hoped that it would not become necessary for her to give up the charge of the college which she has served so efficiently for nearly six years. In that brief time she has seen Barnard nearly treble its number of students, grow steadily in prestige and usefulness, and exchange its old depressing quarters for one of the most delightful and inspiring college homes to be found anywhere. In her letter of resignation Mrs. Putnam referred feelingly to her great love of the college and declared that her best comfort was the hope of still being able to render it unofficial service. May it be so. The QUARTERLY tenders to her its cordial congratulations upon the good work she has done and its earnest hope for the speedy restoration of her health.

THE UNIVERSITY

The Religious Activities of the University suffer unavoidably at the present time from the lack of a suitable chapel and also from the general decentralization of our academic life. That the appearance and atmosphere of an ordinary lecture-room are not highly favorable to a devotional frame of mind is obvious. Moreover, the chapel exercises are necessarily held at an early hour, when many students and officers who might be glad to attend them are still on the way from their distant and widely scattered homes. When the University shall possess a beautiful chapel, and when our academic life shall have become more concentrated by the erection of dormitories, it will be reasonable to expect a notable increase of interest in matters of religion.

And yet, notwithstanding the existing adverse conditions, the Chaplain reports that the attendance at chapel is encouraging

and on the increase. During the current year the usual exercises have been supplemented by brief addresses, given not only by the Chaplain but also by other officers of the University. Up to this writing the speakers have been President Low and Professors Van Amringe, Butler, Hutton, Sloane, Giddings, Burr and Todd. Addresses have been promised hereafter by Professors Munroe, Burdick, Kemp, Clark, Thomas and Rees, and by Dr. Canfield, the Librarian. The Chaplain also notes, as a "gratifying feature of the religious work in the University," that an increasing number of students are availing themselves of the hours set apart for conference with himself. In this connection, it is of interest to note that, at the suggestion of the Committee on Sunday-schools of the Diocese of New York, Dr. Van De Water has undertaken a course of ten lectures, to be delivered to the Sunday-school teachers of the city, upon "The Life and Labors of St. Paul."

Mr. Albert Britt, general secretary of the Columbia Young Men's Christian Association, reports that, while the efficiency of that body is impaired by the conditions above referred to, the meetings are "fairly well attended and the interest among the members is growing stronger and finding expression in greater activity." The Secretary goes on to say:

"Were all the professing Christians in the University members of the Association, our work would express more thoroughly the Christian influences operative here; but, remembering that many students are at work in their churches, we are disposed to be grateful for that which we have been able to do. The Bible-study work of the Association is prospering, in spite of many disadvantageous circumstances. The class this year is studying the life of Christ, under the leadership of Mr. H. W. Georgi, secretary of the Students' Club. The attendance at the meetings of the class is nearly double that of last year. Greater emphasis is being placed on the social work of the Association, and evening meetings of an informal character, to bring the members closer together in a fraternal way, are being held and are well attended."

"On January 17th Mr. John R. Mott, Secretary of the World's Student Christian Federation, delivered an address on 'Temptations of Students in all Lands,' before an audience of over two hundred students, President Low presiding."

"The *Students' Hand Book*, published annually by the Association in connection with the Students' Club, is very popular and, like the list of personally inspected boarding-houses issued by the Association, gives great aid to new students."

* * *

For **Special Students**—that is, students who wish to pursue particular courses without reference to a degree—it is the policy of the University to make generous provision. While the Schools of Political Science, of Philosophy and of Pure Science, are intended primarily for graduates, it has not been the practice to regard the bachelor's degree as indispensable for admission. This being so, and it being also true that many advanced courses can be taken either in the College or in one of the non-professional University schools, some difficulty has arisen with regard to the proper registration of special students. On account, probably, of the superior prestige of belonging to a graduate school, the higher status has been sought by many students whose age and general attainments would assign them rather to the lower. To meet this condition and to define precisely the status and the obligations of all students not working for a degree, the University authorities have lately adopted the following regulations concerning the admission of special students to either of the schools above mentioned :

Students of mature age who give evidence of earnest purpose and special fitness may register for any of the courses under the control of this Faculty. By special fitness is meant, in the case of those not holding a first degree, an equipment for the course intended to be taken such as would justify candidacy for a degree, if the preliminary requirements could be fully met as by a regular student. Of such fitness the head of each department under which the applicant wishes to study is to be the judge, and his approval must be expressed in writing to the Dean of the Faculty.

Special students are expected to pursue seriously the work of the course for which they are enrolled, and will be required to pass examinations therein at the discretion of the professor giving the course. A special student may be excluded from any course which he is following, if the instructor in charge be satisfied that such student is not giving due attention to the work of the course.

Persons desiring to enroll for the purpose of listening to the lectures of a given course, for such profit as may come therefrom, are required to enroll as auditors. Auditors will not be examined, and neither are they given the status of students.

These rules are supplemented by a general administrative direction which reads as follows:

The aim of the College is to give general training, and the aim of the non-professional Faculties is to make specialists. Students not holding a first degree and wishing to take as special students courses offered through the College, should ordinarily register in the College, unless they propose to combine such work with other courses tending to qualify them as specialists.

* * *

At the request of the President, the duties pertaining to the chairmanship of the **Appointment Committee** have been assumed by Dr. J. H. Canfield, who succeeds Professor Butler. Dr. J. E. Russell replaces Professor McMurtry as representative of Teachers College. The continuing members are Professors Hutton, Seligman, Cattell, Todd, Kirchwey, Carpenter (G. R.), Wheeler and Thomas. The records of the Committee are kept in Dr. Canfield's office and contain the most complete and accurate information that it is possible to obtain concerning every graduate of Columbia, Barnard or Teachers College who desires the good offices of the Committee in securing a position as teacher. It is the desire of the President that, while all officers are left perfectly free as individuals to give such recommendations as they see fit, all recommendations purporting to come from Columbia University should issue from the Appointment Committee, which will undertake a thorough and impartial investigation of the claims of any applicant before giving him the University's official endorsement. By a recent formal action of the Committee, it will confine its work hereafter to examining and reporting upon the qualifications of those who wish to teach or to secure some other educational position.

THE LIBRARY

A number of changes have been made in the reading room for periodicals. The cases containing plans of the German Universities have been moved to the drawing room of the Avery Library. With two exceptions, the cataloguers who formerly had seats in this room have been assigned to desks elsewhere. This has more than doubled the seating capacity of the room for readers.

During the past six months the use made of current periodicals

has so largely increased that it frequently happens that every seat in the room is occupied. Reading-lists on current topics are from time to time prepared and posted on the bulletin board. Under a recently adopted rule, current numbers of periodicals are not allowed to circulate until they have been fifteen days in the Library.

Through the courtesy of the management of the Brooklyn *Eagle*, the New York *Times*, the *Staats-Zeitung*, and the *Mail and Express*, those papers are now supplied daily. From other sources we are obtaining the *Tribune* and the *Evening Post*. Among other periodicals recently added to our list are the following: *Harper's Weekly*, *Literary Digest*, *Journal des Débats*, New York *City Record*, *McClure's Magazine*, the *American Stationer*, and a number of publications of labor unions and other similar organizations.

The Library is contemplating the compilation, in coöperation with certain other libraries, of a new edition of the union list of periodicals to be found in New York City. Lists have been prepared of all sets of periodicals now in the Library, with a view to filling the gaps in these as rapidly as possible; and one of the most responsible firms in this country is now making estimates and preparing bids for these very desirable purchases.

Additional shelving for over four hundred volumes has been placed in the center of the general reading room, and the use of the reference books in this room has been greatly facilitated by placing over the several sections signs in large letters, showing broadly the classification of the books contained in each.—The second section to the right of the entrance has been assigned for the temporary display of new books added to the Library; and these volumes attract much attention.—A number of carefully selected duplicate works of English and American authors have been placed on the shelves for special use (in this room only) of students in the department of rhetoric and English composition.

Among the more important additions since our last issue are the following: 47 volumes *Société de l'Histoire du Protestantisme Français*; 26 volumes *Zeitschrift für deutsches Alterthum*; 21 volumes Jäger's *Histoire de l'Église Catholique en France*; 7 volumes Reports of the Supreme Court of the Hawaiian Islands; 44 volumes of State Reports, etc., from the Stationery Office, London; 29 volumes *Le Cabinet Historique*; 32 vol-

umes Oxford Historical Society; nearly 100 volumes of reports, etc. (very valuable), of the Educational Commission of Great Britain; a complete collection of Treaties between Great Britain and Other Powers—20 volumes; 11 volumes of Treaties relating to India; 112 volumes *Nederlandsche Jaerboeken*, 1748–1792; 30 volumes *Sammlung der Württembergischen Gesetze*, 1828–1851; The New York *Daily Times*, 1872–1896; 28 volumes of the *Chautauquan*.

THE COLLEGE

By unanimous action of the College Faculty, taken January 26th, a notable change was made in the requirements for admission. The change does not affect the amount of work required in any particular study or in the aggregate; but it extends the candidate's latitude of choice by removing Latin from the list of prescribed studies, makes it possible to enter the Freshman class without a modern language, introduces a system of numerical values in accordance with the suggestion of the National Educational Association and, finally, substitutes an admirably clear and simple formulation for one which, it cannot be denied, was somewhat bewildering. The new statement will be in substance as follows:

Every candidate for admission to the Freshman class will be required to pass examination upon subjects selected from the following list and amounting in all to at least *fifteen points*, the value assigned to each subject being indicated by the annexed figure:

ELEMENTARY SUBJECTS

English	3	Physics.....	1
Mathematics.....	3	Chemistry	1
Latin	4	Botany	1
Greek	3	Physiography	1
German	2	Zoölogy	1
French	2	History.....	1
Spanish	2		

ADVANCED SUBJECTS

Latin	1	Mathematics	1
Greek	1	Physics	1
German	1	History.....	1
French	1		

The only restrictions placed upon the candidate's choice will be these: (1) That elementary English and elementary mathematics are prescribed for all; (2) that no candidate will be allowed to secure more than four points from among the elementary modern languages or, (3) more than two points from among the elementary sciences.

By way of explanation, it may be said that a "point" in this scheme means one average year's work in a good secondary school, at the rate of five periods a week. The figures are not to be taken as expressing any opinion of the Faculty concerning the relative educational value of different subjects—a fact of some importance to note, since the system of numerical values adopted by the Faculty of Harvard College is based, in part at least, upon a theory of educational values. The Columbia Faculty, recognizing the great divergence of opinion that prevails with respect to the relative disciplinary value of different preparatory studies, and wishing to adopt a unit that shall be as definite as possible and dependent as little as possible upon differences and fluctuations of individual opinion, have chosen to define their "unit 1" as one year's work in the secondary school. That this is not an ideally perfect unit is obvious, since the amount of work that can be done in one year by a school will vary more or less with the character of the school and with the age and advancement of pupils. It is believed, however, that this unit is less open to objection than any other.

To quote the exact language of the committee which recommended the change: "The quantitative unit, involving merely the time spent upon the subject, is the only practicable basis of comparison between the subjects. Any specific educational value which the Faculty may wish to attach to a given subject, cannot appear in the unit itself, but must appear in the restrictions or prescription placed upon the subject either at admission to college or before graduation." It will be observed that the number "fifteen," the minimum of points to be required for admission, is simply a mathematical formulation of the old requirement: English (3) + elementary mathematics (3) + Latin (4) + Greek (3) + a modern language (2).

The most noteworthy change involved in this scheme is the placing of Latin among optional subjects. It had been "forcibly

brought to the attention of the President," as he explained in a letter of December 5, 1899, addressed to the Committee on Curriculum and Scheme of Attendance, that "some students in the public high schools, who formed late in their course a desire to enter college, were unable to do so because they had not chosen the studies prescribed for college preparation, and were not permitted to offer as equivalents the studies which they had happened to pursue." The President requested the committee to consider the question whether it would not be wise for Columbia College to "meet this difficulty by offering opportunity to high school graduates, who had not taken a classical or college preparatory course, to pursue, after entering college, those subjects demanded for the A.B. degree which they had not taken in the high school." The new scheme is believed to be a perfect solution of this problem. It is sufficiently elastic, so that a boy who has completed any good high-school course should be able to secure admission to the Freshman class of Columbia. In making this provision, however, it is not the purpose of the Faculty to remove Latin from the list of subjects required for the A.B. degree: Latin will continue to be indispensable for that degree, but *may* be begun in the College. The new statement of requirements for admission is to be supplemented by a new scheme of requirements for graduation. At this writing certain details of the scheme are still under consideration. An account of the changes may be expected in the next *QUARTERLY*.

SCHOOL OF LAW

The registration lists show a continuance of the prosperity which has for many years attended the work of the School. The total membership for the first half year is 378, which is 30 in excess of the maximum of last year and represents the high water mark of the enrolment since the reorganization of the School in 1891. This membership is distributed as follows: third year class, 99; second year class, 112; first year class, 166, and special students, 1. The enrolment shows also the presence of the unusual number of 18 seniors of the College taking courses in law.

Perhaps the most significant fact in connection with the registration is the small number of men lost from the School after the

winnowing of the first year. Thus, the present second year class of 112 is the salvage from a class which numbered but 21 more during the whole of its first year in the School, while the third year class lost only six of its members in making the transition from the second year. When it is considered that two years has usually been regarded as an adequate allowance of time for preparation for the bar, and that, when our students reach the end of their second year, most of their friends and acquaintances who are pursuing their studies in other law schools and in law offices are turning from their books to engage in the active work of their profession, it is certainly a noteworthy fact that so few of our students succumb to the temptation to go and do likewise.

The increase in the number of college graduates keeps pace with the growth of the student body, there being this year 235 graduates representing 68 colleges and universities, as against 216 last year, from 60 colleges. The Columbia delegation, still far too small, shows an increase from 23 to 31, the New York City College still leading, with 33. Yale sends 27 representatives; Harvard, 18; Williams, 16; Princeton, 5, and the Puerto Rico Instituto Provincial, 1.

The changes in the teaching staff of the School, announced in a previous number of the *QUARTERLY*, have gone into effect without alteration. Professor Houston, who succeeded Professor Hardon, has taken the latter's courses on common law pleading and wills and administration, together with Mr. Noble's course on bailments and Professor Moore's course on criminal law. For next year he announces new courses in bankruptcy under the new law and in office practice. Mr. Stone, who succeeds Mr. Noble, has taken charge of the practice courses, as well as of the courses on domestic relations and insurance.

Professor Burdick's new work on the law of partnership has been very well received by the profession and is used as a textbook by the class taking that course in the School. Professor Kirchwey has just published for the use of the first year class a collection of elementary authorities on the law of real property, under the title of *Readings in the Law of Real Property*.

SCHOOL OF MEDICINE

Surgery at Roosevelt Hospital.—In the President's last *Annual Report*, the curriculum in the department of surgery is described on pages 129 and 130. After referring to the surgical instruction given at the Vanderbilt Clinic and at Bellevue Hospital, the writer says:

This represents an admirably arranged course of practical instruction, which is only marred by the fact—to be remedied, it is hoped, in the future—that the students are compelled to proceed to distant institutions, rather than to be centered in their teaching at the Roosevelt Hospital opposite the College buildings.

The reader will hardly gather from this that much, if any, surgical instruction is given at the Roosevelt Hospital itself; and therefore I make this report for the *QUARTERLY*.

Ever since the foundation of the Roosevelt Hospital, it has been a center for surgical teaching, the students of the College of Physicians and Surgeons being those who were specially invited, and for whom the clinics—medical, surgical and gynecological—were especially held. No surgical clinics in New York were so regularly and eagerly attended throughout the year as those given by my distinguished predecessor, the late Dr. Henry B. Sands. Under his thoughtful administration and advice, the large and carefully appointed out-patient department of the Roosevelt Hospital was established, which has been ever since its foundation an active school of instruction for the students of the College. It is a well known fact that the existence of this completely appointed hospital and out-patient department on the south side of 59th Street determined the site of the new college building directly opposite. The hospital and the out-patient department were served by a very able corps of physicians and surgeons, who were all interested in the success of the College and anxious to do all in their power to educate its students. These efforts to instruct students have been constantly increased; and to-day, as for some years past, in the department which the writer now represents, a larger amount of carefully arranged systematic surgical teaching is given than in any similar institution in this city.

In the departments of medicine and gynecology, with the details of whose management I am not so familiar, constant in-

struction is given throughout the college year to a large number of students. In the department of surgery instruction has been given in the Hospital for about four years in the following manner, the details of the plan having been first carefully arranged in consultation with the Faculty of the College. One systematic course has been given throughout the year to third-year students, and a separate and more advanced course to fourth-year students. The third-year students have been taught four days of every week, in sections of twenty each, by my very able assistant, Dr. A. B. Johnson, who has at his disposal all of the patients in the surgical division of the out-patient department and all of my patients in the surgical wards of the Hospital. The time given to each section is an hour and a half or longer; and as the class is instructed in sections, every student is brought close to the patient and is thus rendered practically familiar with every detail dwelt upon.

Beginning with bandages, every variety of bandage is illustrated, and each student is taught to apply them to the living subject. Splints of various kinds and all the special apparatus, such as is used in the treatment of fractures, are applied to patients who are brought from the out-patient department, from the hospital accident-room and from the surgical wards. By the examination of fresh cases each student is taught the diagnosis of fractures and the instruction is made more complete by quizzing upon the subject, by drawings upon the blackboard, and by frequent reference to the skeleton.

Following the study of fractures comes the subject of dislocations, which is illustrated by the presentation of every such injury entering any department of the Hospital. All local and general anæsthetics are lectured upon, and practical illustrations of their use are given. This course includes a practical demonstration of the use of hypodermic syringes and aspirating apparatus of various kinds, and all the instruments commonly used in surgery are exhibited and their use carefully demonstrated. Very valuable instruction is given by Dr. Johnson in regard to the taking of surgical histories—a department in which so many practitioners are weak. Ample time is given to explaining the preparation of surgical dressings of all kinds, to the sterilization of these, as well as of catgut, silk and all other suture materials, and

to the manifold details of the sterilization of patients and of the surgeon's hands. Practical demonstrations are given in the treatment of ulcers and of clean and infected wounds. Finally, these third-year students are shown cases of the simpler forms of surgical injury and surgical disease, other than those referred to above, and are instructed in the less difficult portions of surgical diagnosis.

The fourth-year students are received in the Syms Amphitheatre for two hours each week. The class is divided into two sections, and each section is instructed during one-half of the college year. This course includes the more difficult portions of surgical diagnosis and the treatment of the graver surgical injuries and diseases, such as are to be found in the hospital wards. Especial attention is paid to the treatment of compound fractures and to the post-operative treatment of the graver surgical conditions, the examples of which are constantly present in the wards and are freely utilized. The course is a very practical one. Groups of students are invited to occupy seats in the pit, and each one is allowed to examine the patient and to ask him questions, after which each student is expected to discuss the diagnosis and treatment of the case. Dr. Johnson then lectures upon the differential diagnosis in each case and describes in detail the treatment, operative or non-operative. Students are encouraged to discuss the subject in hand freely with the lecturer, and to ask questions. The special use of instruments employed in diagnosis is described; all such instruments are exhibited, and, wherever possible, their practical application is demonstrated. This course includes the use of the cystoscope, with which, on one occasion last year, over fifty students had the opportunity to examine a tumor in the bladder. There are also shown the various instruments used in differentiating the urines, such as Harris's instrument and ureteral catheters. A recent addition to the course has been made by Dr. Johnson in the form of an X-ray plant.

The active character of the hospital service has frequently permitted the lecturer to present to his class quite large groups of patients illustrating the same surgical lesions in different stages. Special attention has been paid in this course to the post-operative treatment of wounds under the conditions following complicated operations upon different regions. In fact,

every effort is made to have the course represent the highest type of clinical instruction. In addition to these regular courses given in the Hospital during the college session, courses of six weeks each are given during the summer in the out-patient department, by the assistant surgeons of the department under Dr. Johnson's immediate supervision. The number of students in each class is limited to five, in order that the instruction may be most direct. The subjects taught are minor surgery, surgical diagnosis, genito-urinary diseases, skin and venereal diseases, orthopedic surgery, and operative surgery upon minor cases.

During the entire college year I hold an operative clinic of about three hours every Saturday afternoon in the Syms Amphitheatre, which is very largely attended by the students of the College. Operative cases for this clinic are selected as carefully as possible, so as to represent in the course of the year a large variety of the more important and difficult surgical lesions and operations; and on each occasion, before the operations for that day are begun, the patients operated upon at the previous clinic are shown to the students, their histories reviewed, and their wounds re-dressed and explained. Each operative case is first made the subject of a lecture, and in the course of the operation the various steps are discussed. It is possible, perhaps, that this course of surgical instruction, as now given at the Roosevelt Hospital to the students of the College, may in the future be amplified; but at present the College curriculum will hardly permit that more time be given by the students to this branch of their education.

C. MCB.

Department of Neurology.—Professor M. Allen Starr has recently been elected a corresponding member of the Neurological Society of Paris, of which Professor A. Joffroy is president.

Department of Physiological Chemistry.—Professor R. H. Chittenden has recently been seriously ill. During the period of his illness Dr. William J. Gies gave the regular lectures of the course.

William D. Cutter, A.B. (Yale), has been serving in the position of assistant, *vice* A. C. Eustis, Ph.B., resigned.

At the recent sessions of the American Physiological Society five reports of original work done by investigators in the depart-

ment were made, as follows: "A preliminary study of the coagulable proteids of connective tissues," by A. N. Richards and William J. Gies.—"The gluco-proteids of white fibrous connective tissue," by William D. Cutter and William J. Gies.—"The physiological action of tellurium compounds," by L. D. Mead and William J. Gies.—"The preparation of a mucin-like substance from bone," by William J. Gies. "The proportion of basic nitrogen yielded by elastin on decomposition with hydrochloric acid," for A. C. Eustis by R. H. Chittenden. Abstracts of these appear in the *American Journal of Physiology* and in *Science*.

Dr. Hodenpyl, of the department of Pathology, recently presented before the New York Pathological Society a "Report of the Chemical Examination of a Knife Grinder's Lung," in which he gave the results of very complete analyses made for him by Assistants A. N. Richards and A. C. Eustis, of this department. The report appears in the *Medical Record*, Vol. 56, p. 943.

Dr. Gies spent most of the past summer at the University of Bern, engaged in research work with Professors Kronecker and Asher. With Dr. Asher, he is about to publish a paper in the *Zeitschrift für Biologie*, on "The influence of protoplasmic poisons on the formation of lymph." Dr. Gies attended the sessions of the British Association for the Advancement of Science, held at Dover in September, and gave an account before the Physiological Section of his research with Prof. Kronecker "On stimulation and excitability of the anaemic brain."

Department of Surgery.—Ellsworth Eliot, Jr., M.D., has been appointed clinical lecturer in surgery from January 1, 1900.

Department of Anatomy.—H. E. Hale, M. D., has been appointed assistant demonstrator of anatomy from October 1, 1899, for one year.

SCHOOLS OF APPLIED SCIENCE

Department of Architecture.—A modification of the system hitherto followed in preparing the programs for fourth-year design problems has been attempted, with gratifying results. The program of some building actually erected, or for which a

competition has been held, is given out as a problem in design, instead of a program wholly ideal or imaginary in character. The comparison of the students' solutions with the executed work, or with the designs submitted in the competition, forms an admirable basis for criticism; and the practical character of the problem which is assured by such a program imparts an interest quite different from that of a purely academic problem and is often very stimulating. The last problem, for example, was a yacht club building, based on the program of the new building for the New York Yacht Club on 44th Street. The problem now occupying the class is identical with that of the Madison Square Garden.

The instruction in building materials is now being entirely given by C. P. Warren, who has accumulated an extremely valuable array of illustrative matter, both in the way of diagrams, prepared by himself, and of samples of structural forms, materials and appliances. Recent acquisitions are samples of various building- and cabinet-woods, showing sectional and planed and varnished surfaces.

The preliminary announcements for the coming sixth Columbia fellowship competition have been sent out. The subject is to be "A monumental fountain with cascades in Central Park." The final and detailed program will be given out on Saturday, March 3d, when the contestants assemble for the preliminary sketch competition.

Professor Ware's recent paper on "Competitions," read before the Institute of Architects at Pittsburgh, has attracted wide attention and elicited emphatic approval.

Professor Hamlin has been appointed consulting architect for the competition now in progress for the Naval Branch Y. M. C. A. building at Brooklyn. He will lecture on "Architecture in New York" in the Vanderbilt gallery on February 28th, under the auspices of the Architectural League.

A. D. F. H.

Department of Physical Chemistry.—During the past year instruction has been given to 32 students, of whom eight were graduates. Owing to the small quarters occupied by the department, some difficulty was experienced from the overcrowding of

the laboratory. If the number of students continues to increase, it will be necessary to divide the students into small squads or to enlarge the laboratory. Owing to the peculiar nature of the work, the former expedient will be almost impossible, so that in a short time an increase in the size of the laboratory will be absolutely essential.

The following researches are now under way or have recently been published: "Electrolytic cells for rectifying alternating currents," by W. L. Hildburg, thesis for degree of Ph.D., to be published shortly.—"Three additions to the Kohlrausch-Ostwald conductivity method," by J. R. L. Morgan, *Jour. Amer. Chem. Soc.*, Jan., 1900.—"New interrupter for the Kohlrausch-Ostwald conductivity method," by J. L. R. Morgan, *ibid.*—"Specific gravity and electrical resistance of metallic tellurium," by Victor Lenher and J. L. R. Morgan, *Jour. Amer. Chem. Soc.*, Feb., 1900.—"Electrolytic deposition of brass," by J. L. R. Morgan, *ibid.*

Laboratory of Industrial Chemistry.—The opening of the current year showed an increased registration in this department. The course in the preparation of chemicals has been revised and enlarged, each student being required to furnish a certain number of preparations, the yield and purity of which determine his mark. The product is tested by the instructor according to the methods advised by Dr. C. Krauch, of Darmstadt. This has resulted in better and more uniform production.

A new course has been organized in electro-chemistry, for which a suitable laboratory has been fitted up, most of the wiring having been done by the students themselves. Two advanced students are now taking this course, for which Oettel's *Exercises in Electro-chemistry* has been adopted as a text-book.

Department of Analytical Chemistry and Assaying.—Dr. Miller has completed a text-book on the *Calculations of Analytical Chemistry*, which is now in the hands of the printer.—A preliminary paper on the cobaltcyanides, by Drs. Miller and Mathews, was read at the December meeting of the New York section of the American Chemical Society.

In the assay laboratory special work is being done on the losses of silver in scorification and on the assay of zinc blends.

Dr. Sherman has been analyzing a large number of samples of gravity cream with a view to determining the condition of the fat globules; also, in conjunction with Mr. Hawk, of the U. S. Department of Agriculture, he is investigating the metabolism of proteid foods.

Department of Electrical Engineering.—Through the efforts of President Low, the department has received a gift of \$2,500 intended for the purchase of new apparatus for lecture room demonstration and laboratory work. It is purposed to purchase two sets of multipolar compound generators (DC), with motors to drive them, additional alternating current dynamos and motors, and measuring instruments. This fund will enable the department to procure sufficient apparatus to provide for the instruction of the increasing number of students from all the departments that include electrical engineering in their courses.

The department has issued an eight-page pamphlet on "Contributions," which gives a complete list of all of the publications of the officers of the department between 1890 and 1899, and shows the title, author and the papers or books wherein the article was published. This, with as many of the original articles as can be secured, will be sent to the Paris Exposition.

Mr. Sever has completed a pamphlet entitled *Engineering Tests on Direct-Current Dynamos and Motors, with preliminary Tests on the Properties of Conductors*, for use as laboratory notes for the civil and mining engineers in the third year. Mr. Townsend has devised a new method of tracing alternating current curves, the apparatus being in successful operation in the laboratory. He presented the results of his work in a paper before the American Institute of Electrical Engineers on the 24th of January.

Department of Metallurgy.—Dr. Joseph Struthers retired from the tutorship in metallurgy on January 1st, and Mr. Wray A. Bentley on that day assumed the duties of lecturer on metallurgy.

During the last quarter some 260 specimens or suites of specimens, given by 54 different benefactors, have been added to the museum. Many of these are of very great educational value. Perhaps the most important is a beautiful suite of steel ingots

showing the fractures corresponding to many different compositions. An electrical resistance furnace has been added to the equipment of the laboratory and is now in working order. In addition, a larger one is under construction, and other important additions are under consideration. A large model for lecture purposes to demonstrate the recalcrescence of steel has just been finished.

Investigations into the relative merits of nickel steel, of high- and low-carbon steel, and of platinum as material for electric resistance furnaces, and into the metallography and annealing of unforged steel are being carried out by Professor Howe; one into the metallography of malleable cast-iron by Messrs. A. T. Child and W. P. Heineken; and one into the rationale of the copper refining processes by Mr. Hermann A. Loos.

A course of lectures on metallurgy will be given in March at the American Museum of National History, under the auspices of the department.

An article on "The color names for high temperatures" by Professor Henry M. Howe, has appeared in the *Engineering and Mining Journal*, vol. lxix, January, 1900, p. 75.

SCHOOL OF POLITICAL SCIENCE

The "Studies in History, Economics, and Public Law," edited by the Faculty of Political Science and now in their 12th volume, have been received with an increasing degree of favor both here and abroad, long reviews being devoted to them in recent periodicals. The following quotations are typical:

"We cannot lay down this book without once again expressing our sense of the value of the research work in political philosophy which is being done in Columbia University."—London *Athenaeum*.

"The students of social evolution owe a debt of gratitude to the university that encourages such admirable and exhaustive monographs on practical subjects."—New Zealand *Journal of the Department of Labor*.

"The character of the average thesis submitted for the doctor's degree in Germany and the United States is such as to lead one at times to doubt the utility of the whole scheme which brings forth such ridiculous mice. Columbia, in its department of

political science, has, however, it must be confessed, set a new pace, which other universities find it hard to keep up with. It has turned out in the last few years a series of most valuable monographs, which not only give promise of good scientific work in the future on the part of the authors, but are present evidence of good work already done."—*Municipal Affairs*.

C. F. Emerick, Ph.D., formerly a Fellow in Statistics, has been made professor of political economy in Smith College.—William A. Rawles, Ph. D., formerly a University Fellow, has been made assistant professor of economics at Indiana University.—John Franklin Crowell, Ph. D., formerly a Fellow in sociology, has been made head worker in the Alfred Corning Clark Neighborhood House.—Mr. C. L. Becker, recently University Fellow in constitutional law, has been made instructor in political science and history in Pennsylvania State College.

The Macmillan Company advertises no less than four books by members of the Faculty of Political Science, just issued or about to be published. Of these, two are by Professor Goodnow, one by Professor Clark, and one by Professor Giddings.—Longmans, Green & Company announce *The Elements of Economics*, by Professor Seligman, and *American Foreign Policy*, by Professor Moore.

The subjects treated at the last two meetings of the Academy of Political Science were the Samoan Question and the Anglo-Boer War. On the first evening a paper was read by Professor Moore; and on the second, addresses were made by Sidney Brooks, Thomas G. Shearman and J. W. Martin.

In January Professor Seligman debated the Philippine Question with Mr. Edward M. Shepard before the Peoples' Institute, of New York City; and in February he and Professor Dunning lectured at Poughkeepsie, before the Vassar Brothers' Institute, in a course on the period of Reconstruction.

Dr. Bayles delivered in December last, in the Adams Chapel of the Union Theological Seminary, New York City, a course of six public lectures on "The Legal Relations of Ecclesiastical Organizations." Through *The Civil-Church Press*, Dr. Bayles is about to publish a collection of cases on Civil Church Law, embracing the leading decisions in civil cases relating to churches by the Supreme Court of the United States and by the courts of last resort in the several states.

Department of Sociology.—The work of the department dates from the appointment of Professor Mayo-Smith as professor of political economy and social science in 1883. Beginning with the teaching of history and of political economy in the "classical" sense of the word, Professor Mayo-Smith developed his subject by incursions into the field of historical political economy, which was in great favor in Germany in the early eighties, and into the field of social statistics—the first development of that subject in the universities of this country. The first fruits of his own studies appeared in the volume *Emigration and Immigration*, published in 1890. Somewhat earlier, Professor Mayo-Smith had published, as a monograph in the American Economic Association series, his *Statistics and Economics*, which has since been elaborated in his two comprehensive volumes on the *Science of Statistics*, one dealing with statistical methods and results in social science, the other with statistical methods and results in economics.

In the academic year 1891-2, Professor Mayo-Smith received leave of absence; and, at his suggestion, Professor Giddings, then professor of political science in Bryn Mawr College, was appointed lecturer on sociology for the two terms of Professor Mayo-Smith's absence. The course then begun by Professor Giddings on Friday afternoons was the one in general sociology, which has been given uninterruptedly to the present time, the lectureship having been continued for two years after Professor Mayo-Smith's return. In the spring of 1894, the chair of sociology was founded by the generosity of President Low; and Professor Giddings was called to Columbia from Bryn Mawr. Professor Mayo-Smith had meanwhile greatly elaborated his courses in statistics; and in connection with them had introduced seminar exercises, in which properly prepared students were given the benefit of a thorough drill in mathematical analysis, as applied to statistics, and in exact statistical methods. Professor Giddings had begun the courses in pauperism, poor laws and charities, and in crime and penology, now known as Sociology 22 and 23. In 1896, Professor W. Z. Ripley, of the Massachusetts Institute of Technology, who had taken his graduate work in economics and sociology and his degree of Doctor of Philosophy at Columbia, received a prize

lectureship, and began those courses in the sociological aspects of race, nationality and geographical distribution, which have borne fruit in his great work, *The Races of Europe*. In 1897, Dr. George James Bayles, who also was trained at Columbia, was appointed prize lecturer on the civil aspects of ecclesiastical organizations, a field which is destined to be recognized as of first importance in the coming reorganization of the professional studies preparatory to the Christian ministry.

As now organized, the work in sociology at Columbia includes all the various lecture courses and investigations thus far indicated and, in addition, a great deal of attention to those problems of population, of intermingling of nationalities, of assimilation to American types and standards, and of philanthropy and correction, which are presented in the life of New York City, the most important social observation station in the world. The introductory and theoretical courses, about which all the work is organized, are: First, Sociology 15—a course in principles, including a critical review of the systems of social theory put forth by the chief philosophical writers on human society. Second, Sociology 20 and 21, a course on social evolution, including the origins of civilization, the nature of progress and the development of modern democracy. With this work as a basis, students go on to their more special investigations in social statistics, pauperism, poor laws, charities, crime and correction, and the social problems of great cities. The course on pauperism and poor laws includes a detailed study of the history of the English poor law, the most instructive sociological experiment ever made by a civilized nation; a study of modern methods of public relief, as shown in the organization and work of such bodies as the New York Department of Charities, the New York and Massachusetts State Boards of Charities, the New York State Charities Aid Association, and charity organization societies of this and other cities. The study of crime and penology includes an examination of the modern theories of criminal anthropology and a critical discussion of the theory of responsibility, as historically evolved in judicial decisions.

The department keeps in close touch with the State Charities Aid Association, the Charity Organization Society and the numerous social settlements. All students are required to be-

come familiar with the work of these institutions by personal relations with them, and all are required to do much observational work in other fields in this city. Through the generosity of Mr. V. E. Macy, a Trustee of Teachers College and at one time a student in sociology at Columbia, a collection is being made of the reports and other publications of all the philanthropic and correctional organizations of New York City from their foundation. This is the only approximately complete collection of the kind in existence; and it will be made the basis of numerous investigations of great practical value.

Every winter the more advanced students in statistics under the direction of Professor Mayo-Smith are put upon an investigation of some specific problem, for which the great store of classified material in the registration bureau of the Charity Organization Society furnishes the data. When the Tenement House Committee, of which Mr. Richard Watson Gilder was chairman, was making its exhaustive investigation for the New York Legislature, the Columbia department of sociology was called on to make the investigation of school attendance of tenement house children, their truancy and employment in sweat shops. This work was done by members of the seminar in sociology; and the report which they submitted and which was included in the general report of the Tenement House Committee, has been widely recognized as an authoritative document. Among the published results of investigation begun under the direction of this department, in addition to those already named, should be mentioned Dr. John Franklin Crowell's volume, *The Logical Process of Social Development*, a book that is undoubtedly hard reading, but which has received high praise from scholars in England, France, Germany and Italy, as well as in this country; Dr. Walter S. Ufford's complete and careful study, *The Fresh Air Charities of New York*, and Dr. Adna F. Weber's exhaustive study, *The Growth of Cities in the Nineteenth Century*.

A prize known as the Grant Squires Prize, for the most important contribution to sociology based upon original investigation, will be awarded for the first time at the Commencement this year.

F. H. G.

Department of History.—The students now receiving instruction in the department number 448, there being 50 graduates and 398 undergraduates. This is a gain of 140, or about 40 per cent. over last year. More gratifying even than this increase of numbers is the observable change of attitude in all classes, consisting in the good will to work independently and critically, with less regard to the supervision and impulse of instructors. This is due, we think, to the fact that, while most of the courses devote but two hours weekly to actual class-room lecturing or teaching, they all exact a carefully prepared course of outside reading.

The graduates are, of course, concerned in the main with the labor of erudition. The material upon which they work is yearly richer and more abundant, thanks to the fostering care bestowed on the library and its generous support by givers of great liberality. We have now on our shelves an almost complete set of the original works relating to ecclesiastical affairs during the French Revolution, the Proceedings of the successive legislative bodies during the same epoch, the Journals of the English Parliament, Lords and Commons, since the reign of Henry VIII., a complete set of the collections of the Oxford Historical Society, and invaluable reprints of American Colonial Laws. We are also well abreast of current historical literature. Nevertheless, there is urgent need for still larger expenditure. The policy adopted has been to make the collections for studying certain important epochs in modern history as complete as possible. We now propose to do likewise for early English history and that of the mediæval church, purchasing the printed sources as far as they are available. We urge upon our friends the necessity for gifts comparable in size to those constantly made for laboratories of natural science, pure and applied.

Among the most valuable of our aids to intellectual good-fellowship is the History Club, now in its second year. We have had during the past term, among others, papers from Woodrow Wilson, Paul Leicester Ford and James Breck Perkins. Other historians of equal eminence have promised their coöperation.

During the year the various officers of the department have written about fifteen review and magazine articles, contributions in contemporary history and records of present value for various

publications. The record of books by our professors, either published or in preparation, will be found elsewhere.—Professor Sloane continues one of the editors of the *American Historical Review*.—At the recent meeting of the American Historical Association Professor Dunning was appointed a member of the council and of the committee to consider the publication of a monographic history of the United States; Professor Osgood was placed on the Winsor Prize Committee and the Committee on Colonies and Dependencies, and has also been selected by the Archives Committee to prepare a report on the archives of New York State.—Professor Robinson was made a member of the newly established Public Archives Commission and of the committee on program for next year, and read a paper before the Association entitled "Sacred and Profane History." He has also been selected as a member of the advisory board on history for the new *International Monthly*.

On February 1st, Professor Robinson assumed, by appointment of the President, the duties of Dean *ad interim* of Barnard College.

Dr. Shepherd contributes to the *Revue Politique et Parlementaire* a semi-annual summary of political events in the United States, and to the *Political Science Quarterly* a similar record for the United States and foreign countries.—Professor Dunning and Dr. Cushing are giving regular courses of historical lectures, four in all, in coöperation with various educational organizations of the city.

W. M. S.

SCHOOL OF PHILOSOPHY

Department of Germanic Languages.—At the recent meeting of the Modern Language Association, held at this University on December 27-29, 1899, Professor Thomas presented, as chairman, the final report of the Committee of Twelve on College Entrance Requirements in French and German. The report had previously been printed both by the U. S. Bureau of Education and by the National Educational Association, as part of its "Report of Committee on College Entrance Requirements," dated July, 1899. The government edition in pamphlet form was a limited one, designed primarily for members of the Modern Language Association; but a few copies still remain in the hands

of the chairman of the committee. The edition published by the National Educational Association can be had, together with the other reports making up a pamphlet of 188 pages, by sending twenty-five cents to the *Educational Review*, Columbia University. The report was adopted without dissent by the Modern Language Association; and it is hoped that it may have great value, not as a finality in American education, but as a foundation on which to build and a focus of criticism and discussion.

By the munificence of the Holland Society the department has again been able to offer the public a free course of lectures upon Dutch Literature. The lectures were given on successive Wednesdays, beginning January 10th, by Mr. Leonard C. Van Noppen, who gave a similar course under the same auspices last year. The titles were as follows:

January 10th—"Jacob Cats, the Poet of the Commonplace."

January 17th—"Vondel, the Poet of the Sublime."

January 24th—"Bellamy, the Pathfinder."

January 31st—"The Younger Dutch Poets."

February 7th—"The Dutch Language: Past, Present and Future."

The Deutscher Verein is active and vigorous. Aside from the usual literary programmes of its fortnightly meetings, the Verein has lately had the pleasure of listening to an informal address by Herr L. Viereck, formerly a member of the German Reichstag, upon "Die Pflege des Deutschen an amerikanischen Universitäten."—On the evening of January 27th, Mr. Alfred Remy, A.B., gave a public lecture, under the auspices of the Verein, upon "Das deutsche Kunstlied." The learned discussion of the great German song-writers was admirably supplemented by the singing of Fräulein Hildegard Hoffmann, who was accompanied upon the piano by Mr. Robert A. Gayler.

Department of Greek.—The following table shows the total attendance of students during the current year and also during the year 1898-9:

STUDENTS IN ATTENDANCE	1898-9	1899-1900
Undergraduates, Columbia College . . .	87	104
Seniors, Barnard College, attending at Columbia	12	7
Graduates, men	10	11
Graduates, women	11	20
Teachers College, men	1	2
Teachers College, women	2	2
Increase in 1899-1900: 23.	123	146

Professor Perry will be absent during 1900-1, to serve as professor in the American School of Classical Studies at Athens, and the control of the department will devolve upon Professor Wheeler.

The monograph, *The American University*, in the series prepared under the editorship of Professor Butler to form a part of the United States educational exhibit at the Paris Exposition, has been written by Professor Perry.

The meeting of the Archæological Institute of America, held at New Haven during the Christmas vacation, was attended by the following members of the Greek department: Professor E. D. Perry, Professor J. R. Wheeler, Dr. M. L. Earle and Dr. C. H. Young. Papers were read as follows: Professor J. R. Wheeler, "Notes on the so-called Capuchin map of Athens"; Dr. M. L. Earle, "Supplementary signs of the Greek alphabet"; Dr. C. H. Young, "Practical hints on ancient Greek dressmaking."

Department of Indo-Iranian Languages.—A course of six public lectures on the Literature of Ancient India was delivered by Professor A. V. Williams Jackson, during December and January, on Tuesday afternoons in Schermerhorn Hall. The Veda, Sanskrit Epic Poetry and the Hindu Drama were the subjects. A second series was given in February, including one lecture each by the graduate students, Mr. Montgomery Schuyler, Jr., University Scholar in Indo-Iranian Languages, Mr. Arthur F. J. Remy, Assistant in German and formerly Fellow in Comparative Philology, and the Rev. J. E. Abbott, who has lived many years in India, as well as by the Swami Abedananda, of Bengal.

Mr. Louis H. Gray, for two years Fellow in Indo-Iranian

Languages, has several articles on Sanskrit and Persian subjects about to appear in German publications as well as in America. His dissertation on Indo-Iranian phonology is rapidly approaching completion.

Mr. Abraham Yohannan, lecturer on Oriental languages, has been giving courses on Sa'di, Firdausi, and Hafiz, to graduate students during the past two years. Next term he expects to read selections from Omar Khayyām with advanced pupils.

Dr. Jackson has been elected an Honorary Member of the Association for Making Researches into the Zoroastrian Religion, of Bombay.

Department of Philosophy and Education.—The various courses offered this year by the department are largely attended, in several the number enrolled being greater than ever before. The total enrollment in Education 2 (Principles of Education), is 154, which total includes 12 Columbia College seniors, and 23 Barnard College seniors.

The series of "Contributions to Philosophy, Psychology and Education" has now reached the seventh volume, and additional numbers are planned for early publication. The latest issues are:

Vol. 6 (1-4), *Educational Legislation and Administration in the Colonies*, by Elsie Worthington Clews, Ph.D. (October, 1899. Price, \$2.00.)

Vol. 7 (1), *The Education of the Pueblo Child*, by Frank C. Spencer, Ph.D. (November, 1899. Price, 75 cents.)

(2), *The Economic Aspect of Teachers' Salaries*, by Charles Bartlett Dyke, A.M., Professor of Education in Hampton Institute, Va. (October, 1899. Price, \$1.00.)

(3), *Education in India*, by William I. Chamberlain, Ph.D., President of Vellore College, India. (November, 1899. Price, 75 cents.)

Department of Psychology and Anthropology.—The Trustees of the University, at their meeting on January 8th, gratefully acknowledged a gift of \$100,000 from Mr. John D. Rockefeller to endow the chair of psychology occupied by Professor Cattell.

Professor Boas assumed his duties as professor of anthropology at the opening of the present academic year. The depart-

ment has also been strengthened by the appointment of Dr. E. Thorndike as instructor in genetic psychology, in Teachers College. Mr. Clark Wissler has been appointed assistant in psychology; Mr. E. Gerrard, fellow in psychology; and Mr. A. L. Kroeber, fellow in anthropology.

The number of courses offered this year in psychology and anthropology is larger than ever before, and the announcements for next year now in press show a further increase. There will next year be given fifteen courses in psychology and six in anthropology. In psychology courses are offered in general, experimental, genetic, comparative, physiological, abnormal, analytic and philosophical psychology, which cover the field of the science more completely than has hitherto been attempted in any university, American or foreign. Anthropology, with the exception of primitive archæology, is also more fully represented than at any other American university.

When the present laboratory in Schermerhorn Hall was planned, it was supposed that it provided room for at least ten years' growth. But the development of anthropology and the large increase in the number of officers and students in psychology was not foreseen, and during the past two years the rooms have been very crowded. Fortunately for the department, the wing of Schermerhorn Hall immediately above the laboratory has not been fully occupied, owing to the removal of the advanced work in botany to the Botanical Gardens, and one-half of this wing has been assigned to the department. During the summer holidays the space will be divided into a number of research rooms and a staircase will connect the two floors.

The equipment of the laboratory has been increased during the year by a number of new pieces of apparatus required for research and for demonstration. A skilled instrument-maker has been continually employed in the workshop, adding greatly to efficiency and economy. The work has been assisted by grants from the Elizabeth Thompson Science Fund, The American Association for the Advancement of Science and the American Psychological Association. The laboratory is represented in the University's exhibit at the Paris Exposition by a set of instruments for testing the senses and faculties, invented and made in the laboratory, and by thirty-three large charts, showing the laboratory, its equipment and recent research.

The degree of Ph.D. was awarded at the last Commencement to five candidates whose chief work was in psychology. The theses, published in the Columbia "Contributions" and simultaneously as monograph supplements to the *Psychological Review*, are as follows: "The emotion of joy," George Van Ness Dearborn; "Conduct and the weather," Edwin G. Dexter; "On inhibition," B. B. Breese; "On after-images," Shepherd Ivory Franz; "The accuracy of movement," R. S. Woodworth. All those who received the degree have obtained appointments to teach, four of them in leading universities.

The members of the department have during the year presented more than twenty papers, giving the results of original research, before the American Association for the Advancement of Science, the National Academy of Sciences, the New York Academy of Sciences and the American Psychological Association. They have also, by publications, by addresses, in the editing of journals, in the administration of societies, and in other ways, taken part in the scientific and educational work of the country.

J. MCK. C.

Department of Romance Languages.—Professor Henry A. Todd has undertaken the general editorship of the French works to be published by Messrs. D. Appleton & Co., as a part of their recently projected series of "Twentieth Century Text-Books."

The French societies of Columbia and Barnard College have decided to give this year two French plays, *Les deux Sourds*, by Jules Moineaux, and *L' Eté de la Saint-Martin*, by Henri Meilhac.

SCHOOL OF PURE SCIENCE

Department of Astronomy.—The *Astronomical Journal* of January 4th has published the third paper on "The variation of latitude at New York, and a determination of the constant of aberration, from observations at the Observatory of Columbia University," by J. K. Rees, H. Jacoby and H. S. Davis.

This paper brings the observations down to December 1, 1899. A total of 6,518 pairs of stars has been observed on 758 nights since May, 1893. Rees is credited with 3,605 pairs, Jacoby with 302, and Davis with 2,611. Professor Rees has

done the observing alone since July 15, 1899. It is proposed to stop the work in May, 1900, inasmuch as the international plan for the study of the variation of latitude was begun in October, 1899. Papers relating to this work are to be presented in February before the New York Academy of Sciences and at a joint meeting of the American Mathematical and the American Physical Societies.

In the January lectures at the American Museum of Natural History, Professor Rees treated the following subjects:

January 6th. Comets and Meteors.

January 13th. Recent Interesting Achievements of Astronomical Photography.

January 20th. The Solar Eclipse of May, 1900: path of totality across the United States.

January 27th. Some American Observatories: their instruments and work.

The most pressing need of the department is an adequate observatory for graduate instruction and work. Attention has been called to this matter by President Low, in his last annual report to the Trustees.

The following investigations are being carried on in the astronomical laboratory, under the supervision of Professor Jacoby:

1. Bruce Fund for Photographing Star-trails near the Pole of the Heavens.

The photographs to be used in this research are to be made at Helsingfors, Finland, at which place is situated the most northerly of existing observatories of precision. It is desired that the photographic observations be made in a very high latitude, so that the elevation of the celestial pole may be quite large and the effects of atmospheric refraction correspondingly small. A special telescope for this work is in course of construction, and is to be operated by the Helsingfors astronomers. The photographs will then be sent to Columbia for measurement and discussion. Working drawings for the new instruments have been prepared and approved, and it is hoped that the actual work of photographing can now begin without much delay.

2. The Bruce Fund for the Measurement and Reduction of Astronomical Photographs.

The only research going on under this fund at present is the measurement of a series of photographs made at the Cape of Good Hope in 1895. These plates were arranged according to a plan devised by Professor Jacoby, by means of which it is hoped to throw light on the question of optical distortion in astro-photographic lenses. A catalogue of precision for the stars within two degrees of the south pole will be a by-product of this work. A corresponding operation for the north pole is being carried out at Vassar College, also under the general supervision of Professor Jacoby.

3. Reduction of Rutherford Photographs.

Professor Jacoby has ready for the printer a new paper on the Rutherford Pleiades photographs. The former results are here treated by newer methods, and the excellence of Rutherford's work is set forth in a clearer light than before.

Department of Botany.—The long-expected establishment of the graduate work of the department in the museum building of the New York Botanical Garden has at last been accomplished; and the rooms in the Schermerhorn Building are being readjusted to meet the conditions of the original plans—namely, to have them thoroughly equipped for undergraduate work. Plans are well under way for furnishing the conservatory room with a glass enclosure, with two separate apartments for growing plants, one a light room for growing green plants which are in use for laboratory purposes or for physiological experiment, and the other a partially lighted room for the culture of fungi and seedlings which do not require light. These are to be supplied with separate thermostats, so that a uniform temperature can be maintained in each room, independent of the other or of the usual varying temperature of the room outside.

The herbarium and library of the department are now removed to the Bronx, with the exception of such works of reference as are needed by the undergraduate students. One of the immediate advantages accruing to our graduate students by the transfer of the work to the Botanical Garden is the immediate increase of the library facilities from 5000 to 7500 volumes, the latter number representing the present combination of the two libraries.

Additional courses are soon to be announced, involving in-

struction both from the University and the Garden staff. Already twenty graduate students are enrolled for either major or minor work in botany.

A botanical convention is held each Wednesday at 4:30 p. m., at the New York Botanical Garden, open to members of the University and Garden staffs, and to the graduate students pursuing major or minor work in botany. Original work or reviews of recent important botanical literature are presented at the conventions.

Department of Zoölogy.—Every year improves the facilities which the American Museum offers to Columbia students, and many applications for certain courses are now due to the special attractions of the museum. In the branch of vertebrate palæontology, in charge of Professor Osborn, many changes have been made of late. Dr. W. D. Matthew, a graduate of Columbia, has been promoted to the First Assistant Curatorship, and Dr. O. P. Hay, of Washington, has been appointed Second Assistant Curator. This provides for the care of a very great extension of the vertebrate collections, due to two recent gifts. The first is the Cope Mesozoic Collection, including fishes, amphibians and reptiles, brought together by Cope during his thirty years of exploration. This gift by President Jesup at once places this museum in the lead among institutions of the kind in this country. From the evolutionary standpoint, it covers the great life period between the Palæozoic and the Tertiary. The second gift is from the Pampas of the Argentine Republic, a collection which was exhibited at the Paris Exposition of 1878 and purchased by Professor Cope for a large sum but never unpacked until the present time. It represents a view of the wonderful Pampean Fauna of South America and is donated by Messrs. Havemeyer, Dodge, James, Iselin, Constable and Osborn.

These two collections altogether filled 466 boxes, and were transported to New York in four large freight cars. They involve not only an enlargement of the storage space but of the exhibition space; and plans are now maturing for a succession of three halls, the first devoted to the Mesozoic, the second to the Tertiary, and the third to the Quaternary or Pleistocene period, including the Age of Man. By this means, the whole life history of the earth will be presented, terminating with the human

period, which is being developed in the anthropological department.

Graduates of Columbia University, especially of the School of Mines who are working in the Rocky Mountain region, can render great service to the museum and to their alma mater by keeping up an active interest in the discoveries which are made from time to time of fossil vertebrates and promptly reporting the discovery. It is necessary to advise the discoverer not to attempt to remove the fossil but to report it to the museum, so that an examination of its value and extent can be made. A great deal of damage has been done in the past by the unskilled removal of rare and otherwise perfect specimens.

Professor Osborn has recently been appointed assistant to the president of the American Museum of Natural History; he is charged with the general scientific interests of the museum, acting under the president and with the coöperation of the faculty.

Department of Geology.—Through the kindness of one of its friends, the department has received 13 new petrographical microscopes. The class of students in the course in mining engineering, who will take up the microscopic study of rocks this spring, is unprecedentedly large, and it became necessary to increase the equipment in order to provide for them. Twelve of the instruments are for class-room work and one is of superior excellence for the more refined methods of research.

Professor Kemp attended the meeting of the Geological Society of America in Washington during the holidays, and has since reported the proceedings for *Science*.

Professor Kemp has been interested for many years in the geological problems presented by the titaniferous, magnetic, iron ores and has recently published in the nineteenth annual report of the Director of the United States Geological Survey a report on those in the Adirondacks, together with a general discussion of their chemical composition. A further review of all the occurrences hitherto recorded the world over, with a compilation of all the published analyses, has appeared in recent numbers of the *School of Mines Quarterly*. These papers happen to coincide with renewed interest in the metallurgy of these peculiar ores, for titanium-steel is now known to possess

exceptional and extraordinary properties of hardness, besides others that may lead to the utilization of the ores on a large scale. Professor Kemp's *Ore Deposits of the United States and Canada* has just appeared in a third edition, re-written and greatly enlarged. A second and revised edition of his *Handbook of Rocks* is in press.

Through the coöperation of Dr. Hollick with the Geological Survey of Maryland and the Geological Survey of Louisiana, the department has come into the possession of two collections of fossil plants, representing the Tertiary formations of Maryland and Louisiana, respectively. A report upon the latter, fully illustrated, has already been transmitted, and a report upon the former is in course of preparation. The collections contain a number of new species, which are valuable additions to the type specimens in the museum.

A complete course in geological drawing has been inaugurated, under the direction of Dr. Hollick, designed to occupy four hours per week during two years and to comprise work with the pencil, pen and brush in the recognized geologic symbols, map drawing, sketching in the field, methods of noting and platting geologic sections, drawing of fossils, field photography, reproduction from photographs, etc.

Dr. Hollick lectured before the Brooklyn Institute last November, on "The Geology of Long Island" and in February delivered one of a course of lectures at the American Museum of Natural History on "The Vegetable Kingdom from its Beginning to the Appearance of Modern Types."

Dr. Hollick is at present engaged upon two reports for the U. S. Geological Survey: "The Palaeobotany of the Island Series," to include descriptions of the Cretaceous flora of Staten Island, Long Island, Block Island and Martha's Vineyard, and "The Palaeobotany of the Yellow Gravel at Bridgeton, N. J.," descriptive of the Tertiary flora of that locality. The latter is almost completed and will soon be submitted for publication. His final report on "The Relation Between Geology and Forestry in New Jersey" was completed, with additions to date, and transmitted to the Geological Survey of New Jersey in December. It will constitute part of the annual report for 1899. In addition to the above, he has in press, for the Annals of the

New York Academy of Sciences, "A Reconnaissance of the Elizabeth Islands," with illustrations, compiled from field notes taken during the summer of 1898 in connection with the Summer School of Geology.

Mr. van Ingen delivered the opening lecture of the course for February, at the American Museum of Natural History, his subject being "The Oldest Fossils."

Dr. Julien has continued his studies on the weathering of building stones. He has lately investigated, in connection with the work of the local chapter of "Daughters of the Revolution," the tombstones in a very old cemetery in Hartford, Conn. Several, which were too far gone for restoration, have been secured for our museum, where they give most instructive examples of the decay of rocks in a known period of time.

TEACHERS COLLEGE

At a special meeting of the Executive Committee of the Board of Trustees, held January 11, 1900, Mr. Samuel T. Dutton was appointed professor of school administration and superintendent of Teachers College schools.

Professor Dutton is a native of New Hampshire. He was a pupil of Colby Academy, whence he entered Yale and was graduated in 1873. As principal of the high school, he resided in South Norwalk, Connecticut, until 1878, when he was called to the principalship of the Eaton Grammar School in New Haven. He was appointed superintendent of the schools of New Haven in 1882. In 1890 he resigned to become superintendent of the Brookline, Massachusetts, public schools.

The schools of Brookline have attracted wide attention, because of their rapid improvement and growth under Mr. Dutton's administration. Possibly the most interesting feature of his work, in view of his new association with Teachers College, is his training class of college graduates, established at Brookline for intending teachers, which has steadily grown in numbers and efficiency. Professor Dutton has been called upon frequently for lectures in his chosen field, and has given lectures at Harvard, the University of Chicago, Vassar and Boston University. He is the author of the *Morse Speller*, *Social Phases of Educa-*

tion, and editor of the series of historical readers being published by the Morse Company.

An important part of Professor Dutton's work will be the supervision of Teachers College schools, including the three divisions of the Horace Mann School, and the kindergarten and elementary grades of the Experimental School, now maintained at 129th Street and Broadway. In this capacity the superintendent will have the general educational and business administration of these schools, holding practically the same relation to the present officers as does the superintendent of a city school system to his principals, supervisors and teachers. The present arrangement makes no change in the positions now occupied by Mr. Prettyman, Miss Wohlfarth and Miss Runyan, as principals, respectively, of the high school, the elementary school and the kindergarten.

Professor Dutton will offer two courses for graduate students in education. One will deal with school administration, giving special attention to (1) the equipment of school buildings, including construction, lighting, heating, ventilation, sanitation, furnishings and the like; and (2) to the supervision of public schools, including the duties of teachers, supervisors, principals, superintendents and school boards, the conduct of class work, grading and promotion of pupils, and other practical problems in school administration. The other course will be a seminar on the administration of public education in the United States. It is designed for advanced students who are qualified to undertake investigation.

The business management of the *Journal of School Geography* has been transferred to the J. L. Hammett Co., of Boston and New York. This change in financial arrangement affects the editorial policy in no way, as Professor Dodge retains full editorial supervision. In September, 1899, Professor Dodge became also an associate editor of the *Bulletin of the American Geographical Society*, and will hereafter contribute educational notes on geography to that paper.

The work in biology is growing in interest and value. Professor Lloyd's study upon the embryology of the Rubiaceæ is yielding interesting results. A paper embodying his more recent conclusions was read before the Society for Plant Morphol-

ogy and Physiology, recently convened at New Haven.—Professor D. T. MacDougal and Professor Lloyd are about to publish the results of their studies upon the relations of the fungal and phanerogamic symbionts in the Monotropaceæ, and the results of another research with Professor Underwood are soon to be published. The latter will deal with the genus *Lycopodium*.

Outside of the College, Professor Lloyd and Mr. Bigelow have been frequently engaged in lecture work. Mr. Bigelow recently read a paper on the "Embryology of *Lepas*" before the zoölogical seminar of the University of Pennsylvania. At the December meeting of the New York Association of Biology Teachers, Professor Lloyd and Mr. Bigelow explained at length the courses in botany and zoölogy given in the Horace Mann School. Mr. Bigelow is contributing a series of articles upon "The study of the human body" to the *West Virginia School Journal*. He is also pushing toward completion his studies upon the embryology of the genus *Lepas*. Before the Biological Club of Lafayette College, Easton, Pennsylvania, Professor Lloyd gave an address in December on "The food supply of the embryo in the higher plants," and he has just closed a series of five lectures before the teachers of School No. 3 in Yonkers. His general subject was "Nature study in the elementary school."

Walter L. Hervey, Ph.D., ex-president of Teachers College, contributes to the first number of *Teachers College Record* a historical sketch, giving an account of the founding and development of the College down to 1897. The article incorporates the brief sketch by Professor Butler, which recently appeared in the *QUARTERLY*, and Dr. Hervey pays high tribute to the important work performed by Professor Butler as first president. In the main, the article is drawn from Dr. Hervey's personal knowledge, and it makes a most interesting story. Dean Russell's recent articles in the *QUARTERLY*, with a large amount of additional material, make up the rest of this first issue of the *Record*. The organization of Columbia University, the place of Teachers College therein, and the organization and administration of Teachers College are fully set forth. This number of the *Record* thus forms a very valuable document, and a large edition has been ordered. Copies may be obtained on application to the Secretary.

W. H. N.

STUDENT LIFE

Of particular interest to the undergraduate is the recently formed plan for the **Erection of a Dormitory** on 116th street and Amsterdam avenue. A private stock company has been organized which has been given official recognition by the Trustees, and ground will be broken when the capitalization of the company is complete. In the proposed building, 100ms and board will be provided at such a rate as to be within the reach of all. It is obvious that the materialization of this project will mean an immeasurable gain for Columbia, in broadening the scope of undergraduate life and facilitating college activities. Pleasant, indeed, will be the lot of the student whose home is far away, when he is no longer compelled to exist in the unsatisfactory and generally uncongenial atmosphere of the Harlem boarding-house.

About this season of the year there is much activity in **Debating circles**. The contest with Chicago will take place in New York on the ninth of this month, on the proposition, "National regulation of corporations which tend to become capitalistic monopolies is unwise and inexpedient." Columbia decided on the question, and Chicago, having the choice of sides, selected the negative. We have already held two debates with Chicago, and each college has gained a victory. This year Columbia will be represented by Messrs. France, Ernst and Wood, the first two of whom are veterans. In addition, a new field for debating has opened to us this year, in that, the usual Cornell-Pennsylvania debate having fallen through, arrangements have been perfected with the former University that call for forensic contests in 1900, 1901 and 1902. The contestants are, as in athletics, to be limited by strict rules of eligibility. The first debate of the series will be held at Ithaca, some time in April, on the subject, "President Krüger's ultimatum was justified."

In the **Intercollegiate Chess Tournament**, held at the Columbia Grammar School during holiday week, Harvard proved victorious, for the seventh consecutive time. However, the representatives of the blue and white made a good fight for first honors, so that at the end the victors were only half a game

ahead. On the third day of play Columbia took the lead and held it for a day, until the adjudication of an undecided game to Harvard pushed the crimson to the fore. Both Sewall and Falk, Columbia's representatives, are eligible for another year. Sewall is an under-classman and was the junior player in the tournament. The record was:

	Won	Lost		Won	Lost
Harvard.....	9	3	Yale.....	5	7
Columbia.....	8½	3½	Princeton.....	1½	10½

The Freshmen are displaying particular activity in chess, and their team is persistently defeating various preparatory schools about New York. A Freshman Chess Club has been formed, with a large and growing membership.

Though the 1901 *Columbian* did not make its appearance before Christmas, as promised, owing to the usual misunderstanding with the printer, its general excellence largely excused the tardiness of publication. In spite of the fact that the usual literary features fall far below the clever pieces of the last two *Columbians*, and the illustrative work, owing to the graduation of many of our best draughtsmen, is rather below the high artistic standard set by its predecessors, this year-book must be considered a distinct advance on former *Columbians*. It contains half as many pages again as the 1900 book, and is got up generally on a more sumptuous scale. There are many valuable innovations, such as individual photographs of the trustees and the heads of faculties, records of the professors, and an interesting short history of the University. Many photographic odds-and-ends, such as pictures of campus life and snap-shots of the buildings, lend a light and varied tone to the book. We must not fail to note that the typographical errors are much more numerous than usual, the most glaring mistake being in the carefully-worded dedication—to Professor Van “Amridge.”

The **Musical Clubs** made their annual tour during the Christmas holidays. The route included Philadelphia, Scranton, Syracuse and Binghampton. Though artistically the clubs maintain a high degree of excellence, the trip was again financially disas-

trous. The undergraduate eye is beginning to turn with suspicion on the Musical Society. The chief complaint is that the Musical Society, the officers of which form a close corporation and appoint their successors, is on that account not truly representative of Columbia. There is a well-grounded opposition here to having the government of any representative college organization in the hands of a close corporation, and it is probably only a question of time when a reorganization of the musical society will be enforced. Satisfaction could easily be given by making a majority of the officers of the society elective by the members of the three clubs—Glee, Mandolin and Banjo.

The **Philharmonic Society Orchestra** has made great progress under the active leadership of Mr. Gustav Hinrichs, Director. By faithful work a really excellent orchestra has been formed. A concert was given before a large audience at Mendedson Hall on January 19. This exhibition was favorably commented on in print by such critics as Mr. Krehbiel and Mr. Henderson. The orchestra furnished the music at the Varsity Show, thus making the Show an all-Columbia affair.

The principal dramatic event of the year is undoubtedly the **Varsity Show**, which was produced during the week of February 19th, at Carnegie Lyceum. The show this year was "The Governor's Vrouw," by Cane, Harrison and Erskine, seniors in the College. The scene is laid in New Amsterdam, in the year 1642. The action of the play arises from the attempts of Governor Kieft to marry his daughter to the wealthy Van Corlear, and get rid of his termagant of a wife by hiring the Indians to abduct her. The play compares favorably with previous Varsity shows, the music, in particular being above the usual standards. There are fewer special or vaudeville features than usual, and the authors have confined themselves more to the legitimate precincts of regular comic opera. The costumes were more elegant than is ordinarily the case; and, indeed, the whole setting of the play was first class. Even on the first night the house was comfortably crowded, and practically all tickets for the last two performances were sold early in the week. In the following week the play was given at the Academy of Music in Brooklyn.

The cast follows:

Wilhelmus Kieft, S. J. Block, 1900.	Chilblained Eagle,
Diedrick Knickerbocker,	E. L. Tinker, 1902.
G. M. D. Kelly, 1900.	Ebenezer Cheatham,
Anthony von Corlear,	W. R. Planten, 1900, Law.
H. T. Spence, 1902.	Hiram Carver,
Jacobus Van Curlet,	H. S. Harrington, 1902, Law.
Maurice Krickl, 1900.	The Good Vrouw Kieft,
Ver Planck, C. W. Osborn, 1903.	H. R. Dennis, 1902, Law.
Ten Broeck, S. M. Ross, 1902, S.	Katrinka Kieft,
Filching Fox, W. C. de Mille, 1900.	George Matthew, P. G.
Anneke Schuyler, J. S. Bühler, 1901.	
Burgers, Girls, Traders, Indians, Soldiers and Dancing Girls.	

Columbia now has many other dramatic interests. The Sophomore Show, "The Gay Mr. Vane," was produced at Carnegie Lyceum, December 11-13. It was generally recognized as the best Sophomore dramatic attempt in the last few years. In April the French Society, in conjunction with the Barnard Society, will present two one-act comedies, "Les Deux Souds," by Jules Moinau, and "L'Eté de la Saint Martin," by Meilhac and Halévy. The Deutscher Verein also will make its initial thespian bow to the public this spring, in an elaborate production of the first part of Schiller's "Demetrius," to be presented at the Irving Place theatre.

The Junior Ball was held at Sherry's on December 19. It was the usual brilliant affair. The idea the committee had formed for a "Prom.," though it was found to be impracticable this year, probably will not be lost sight of. Possibly the erection of dormitories will bring about the substitution of the more elaborate "Prom." for the time honored Ball.

The Seniors have elected their class-day officers as follows: Valedictorian, R. H. Brooks; Historian, M. H. Cane; Poet, John Erskine; Prophet, Harold Kellock; Presentation Orator, H. S. Harrison; Yew Tree Orator, J. D. Fackenthal; Salutatorian, H. S. Giddings.

HAROLD KELLOCK

ATHLETIC RECORD

The constitution of the new Athletic Association was formally adopted by the students in mass-meeting on December 15. As indicated in the previous number of the *QUARTERLY*, the governing body of the association is to consist of a Graduate Advisory Committee of five, selected annually in spring by the Alumni Council, an Executive Committee of the managers and captains of the various varsity teams, and a joint committee of these two bodies, known as the Athletic Committee. There is a general treasury and a General Athletic Treasurer. The Executive Committee decides nominally on all questions, financial and other, which arise between the various organizations, and has a general supervision over them; it decides, after consultation with the Graduate Advisory Committee, upon the appointment and payment of coaches and trainers; and it is to "consult the Advisory Committee on all questions of importance pertaining to the general welfare of University Athletics." Thus, the General Athletic Committee, which holds four regular meetings a year, maintains an ultimate supervision over athletic affairs, without being burdened with petty questions of detail which would render the machinery of management cumbersome and immobile. It will be seen that we now have a system of athletic management, which, though highly centralized, nevertheless allows to the directors of each association a wide scope of power in their particular jurisdiction. Every student is a member of the new association. The inauguration of this system of management in athletics undoubtedly marks the entrance upon a new epoch in Columbia sport.—W. E. Mitchell 1901 S. has been elected Chairman of the Executive Committee; H. D. Bulkey, 1901, Secretary; and C. C. Sargent, '97, has been chosen General Treasurer.

ROWING NOTES

An attempt is being made this year by the crew management to stem the tide of indifference toward rowing matters by instituting a system of class crews, after the manner followed in most other rowing colleges. The plan is to keep all these crews in training and to have them race frequently until June, when a varsity eight, second varsity, and four will be chosen and taken to Poughkeepsie; and from these the final eight will be picked. But, in spite of this scheme to popularize rowing, the response to the call for candidates was small, the showing of the two upper classes being especially disappointing. The Freshmen, however, turned out generously. About fifty of them appeared, and they are the most promising freshman candidates that have been seen in many years. Dr. Peet has been re-engaged as coach. The Intercollegiate Regatta will be held at Poughkeepsie the latter part of June or the first days of July. Syracuse will enter a crew this year. There will be a regatta at Philadelphia, May 30, in which Columbia will enter her second crew. Eight from Cornell and the University of Pennsylvania and the Harvard Weld crew will also row there. Columbia will again enter a crew in the Harlem regatta.

BASEBALL

Candidates for the baseball team were called January 12, and about seventy men volunteered. Six of last year's Varsity are back. The management has secured H. M. Keator, Yale, '97, as coach. The schedule, of about twenty games in all, includes games with Harvard, Yale, Princeton, Brown, U. of P., and possibly Chicago, the last to be played here. The home games will be played at Manhattan Field, if the Athletic Association is able to obtain sufficient backing to lease the field.

TRACK TEAM

When the call was made in January for Track Team candidates, over two hundred men had signified their intention of coming out for the team. This year's schedule is much more comprehensive than usual, and all signs point toward a victorious season. Probably the most noteworthy track event will be the Columbia Indoor Athletic Carnival, to be held at the 8th Regiment Armory on March 17. At this meet teams from most of the more important colleges will compete. The most interesting part of the programme will be a series of relay races between N. Y. U. and C. C. N. Y., The Law School and P. and S., the Sophomores and the Freshmen, and the New York Preparatory Schools. This carnival will undoubtedly be the most important affair of its kind ever held in New York. The schedule of the season also includes the regular Handicap Games at Manhattan Field, May 5; a meet with Cornell and Williams at Albany, May 12; the Princeton meet, May 19; and the Intercollegiate Games, May 26.

The Track Team has already participated in several indoor events. On January 27th the relay was beaten by Harvard at Boston by a very narrow margin. On February 3d, at Boston, in the relay against Cornell, Long, our speediest runner, sprained his ankle and fell, just as he was taking the lead for a sure victory. Owing to this mishap, and the fact that McAnerny also sprained his ankle in the gymnasium, Columbia was unable to enter a relay team in the K. A. C. games on February 10th, and will be unable to put a team on the track until late in April. There were, however, enough Columbia men entered in the K. A. C. events to capture the team banner for the meet.

GENERAL NOTES

The schedule of the Gymnasium Teams includes a contest with Yale, to be held in our gymnasium on the evening of March 2. There will be a fencing match with Cornell the same evening.—The Intercollegiate Meet will take place March 23, in the gymnasium. This promises to be the largest gymnastic contest ever held between the colleges, as over thirty-five teams will compete. Prospects for our success are favorable, as nearly all the men of last year's team are out and there is much promising material among the freshmen. W. E. Mitchell has been elected President of the I. C. Gymnasium Association.—The Cycle Team will probably hold separate meets with both Princeton and Cornell before

the intercollegiate races in June. The poor showing of our wheelmen last year was due largely to the fact that the men ran off too much weight before the final race. This error will not be made this year, and it is hoped that Columbia may regain some of her prestige on the board track.—The Hockey Team will soon conclude the intercollegiate series of games with Yale, Princeton and Brown. The scores thus far have been: Columbia 6, Princeton 1; Yale 11, Princeton 0; Columbia 7, Brown 2; Yale 7, Brown 1; Yale 2, Columbia 0.—W. E. Mitchell has been re-elected manager of the Football Team, and Thomas Simons captain. Sanford will again coach the team next year. The financial report for the '99 Varsity Eleven follows:

RECEIPTS

Undergraduate and graduate subscriptions . . .	\$ 1,528 80
Loans	1,200
Tickets, etc.	46,914 94
All other sources	1,225
	<hr/>
	\$50,868 74

EXPENDITURES

For Manhattan Field	\$14,391 58
Guarantees	17,104 17
Athletic goods	2,097 50
Advertising	1,272 65
Furnishing house	928 75
Expenses of team, including coach, transportation, fall practice, etc.,	10,499 37
Payment of loans	1,200
Balance in cash	3,374 63
	<hr/>
	\$50,868 74

ASSETS

Cash balance	\$3,374 63
Cash assets	724
Athletic and house goods	1,500
	<hr/>
	\$5,598 63

LIABILITIES

Sundry accounts	\$ 500
Credit balance	5,098 63
	<hr/>
	\$5,598 63

THE ALUMNI

On December 4th the Alumni Association of the College held its first meeting of the winter. The members of the University football team and the manager, coach and substitutes, who were present as guests, were presented by the Association with silver match-boxes. The presentation speeches were made by Dean Van Amringe, who spoke in his usual felicitous manner and was responded to by the captain and other members of the team. Speeches were also made by several graduates who have been prominent in football matters in former years, including W. T. Lawson, '82, who was the field captain of the team in 1881. In the course of his speech Mr. Lawson alluded to the death of Frank L. Henry, of '82, and Walter N. Eldridge, of '83, which had occurred during the last year, and spoke in high terms of their record in athletics, as well as in other college matters.

Thomas Nolan, B.S., and M.S., Rochester, and Ph.B. in Architecture, Columbia, 1884, has been made professor of architecture in the University of Missouri, Columbia, Mo. After practicing his profession at Rochester, N. Y., for a few years after graduation, Professor Nolan studied abroad, part of the time at the École des Beaux Arts. In 1897-8 he pursued graduate studies at Columbia, and in 1898-9 was a member of the Faculty of Architecture at the University of Pennsylvania. His present chair is the first of the kind west of the Mississippi River and is one of the only two west of the Alleghanies.

NEWS OF THE COLLEGE CLASSES

[In this department it is intended to publish items of current interest concerning members of all classes of the College. So far as possible, the news for each class will be presented at regular intervals—as often, at least, as once a year. In order that this plan may be carried out effectively—with the result, it is hoped, of preserving college friendships and maintaining loyalty to the College—*graduates are cordially invited to send to the EDITORS news items about members of their own or other classes.*]

1843

James Watson Gerard (LL.D., '98) died at his home, No.

17 Gramercy Park, on January 28th last. After graduation Mr. Gerard was for a time United States attaché at London. When he afterward began the practice of law in this city, he became somewhat prominent in public affairs, serving as school inspector, school commissioner and state senator. His work upon the law of real estate has been regarded as authoritative.

1851

Secretary: Dr. W. H. Draper, 19 East 47th Street.

C. H. Ward (A.M., '55), since his retirement from the banking house of Ward & Co., in 1874, has devoted much time to studies of drawing and painting.

1855

Secretary:

J. R. Hosmer, at the breaking out of the war with Spain, was reappointed by President McKinley to the same position he held in the Civil War and assigned to duty as acting depot quartermaster at Dunn Loring, Va., in connection with Camp Alger. Later he was made purchasing, disbursing and issuing quartermaster at Matanzas, Cuba.—Dr. G. A. Ostrander (P. and S., '58) has practiced medicine for over thirty years within two blocks of his present residence, 61 Greene Ave., Brooklyn.

1859

Secretary:

Rev. Dr. Wm. T. Sabin has, since 1874, been pastor of the First Reformed Episcopal Church of New York.

1863

Secretary: Rev. Rockwood MacQuesten, 92 Washington Ave., Long Island City.

Rev. G. W. Ferguson is rector of Trinity Church, Sing Sing, N. Y.—Rev. S. F. Holmes has been since 1894 rector of St. Johns Church, Pleasantville, N. Y.

1867

Secretary: H. D. Lloyd, *Daily Tribune*, Chicago, Ill.

Julius Sachs (Ph.D.) has been President of the New York Schoolmasters' Association, the American Philological Association, the Middle States Association of Colleges and Preparatory

Schools and the Headmasters' Association; and was a member of the Latin Committee acting under the Committee of Ten and of the Conference Committee with Colleges of the Middle States to secure a common board of entrance examinations.

1871

Secretary: Clarence A. Conger, 37 Liberty Street.

Dr. Francis Hustace (P. and S., '74) is engaged in the practice of medicine at 413 Madison Ave.—Brander Matthews (D.C.L., University of the South, '99), now officially known in the University as Professor of Dramatic Literature, is abroad on his sabbatical year, visiting Constantinople and going up the Nile.

1875

Secretary: Alister Greene, 15 Broad Street.

Rev. H. I. Bodley acted as private secretary to Bishop Potter during the absence of Rev. Dr. George F. Nelson on the Harri-man Alaskan expedition, and has since become rector of St. Mark's, New Britain, Conn.—T. S. Ormiston (LL.B., '77) has been a trustee and treasurer of the New York Law School since its foundation.—E. D. Perry (Ph.D., Tubingen, '79), Jay Professor of Greek, has leave of absence from Columbia to serve as professor at the American School of Classical Studies at Athens for 1900-01.

1879

Secretary: J. A. Lynch, 99 Nassau Street.

W. E. Gould is instructor in Spanish at Johns Hopkins University.—W. B. Parsons (C. E., '82) has been chief engineer of the Rapid Transit Commission since 1894. In 1897 he became a trustee of Columbia. In 1898-9 he made the longest survey for a railroad ever made in China.—E. R. A. Seligman (LL.B. and Ph.D., '84), professor of political economy and finance at Columbia, is president of the Tenement House Building Company and chairman of the Committee on Education at the Educational Alliance.

1883

Secretary: E. B. Holden, 1 Broadway.

Rev. J. V. Chalmers has since 1897 been vicar of the Church of the Holy Trinity (East 88th Street), in the unique group of re-

ligious buildings erected by Miss Serena Rhineland in memory of her father.—Alfred Gudeman (Ph.D., '88, Berlin), has been, since 1893, professor of classical philology at the University of Pennsylvania.—Rev. Taber Knox (Union Seminary, '86), has since 1894 been pastor of the Reformed Church at Warwick, N. Y.—E. J. Levey (LL.B., '86), is assistant deputy-comptroller of the city of New York, and is secretary of the Commissioners of the Sinking Fund and of the Board for the Revision of Assessments.—F. L. H. Pott (B.D., '86, General Theol. Sem.), is President of St. John's College, Shanghai, China. In this institution there are about 160 students, two-thirds in the preparatory and one-third in the collegiate department. He has married a daughter of one of the native clergy and has done a considerable amount of literary work in the Chinese language.

1887

Secretary: Leonard D. White, 47 Broadway.

M. H. Harris (Ph.D., '89; grad. Hebrew Theol. Sem.), Rabbi of Temple Israel, of Harlem, is author of *People of the Book*, a Bible history which is used in Jewish Sunday-schools throughout the United States.—Charles Knapp (Ph.D., '90), has since 1891 taught Latin and Greek at Barnard College.—Rev. J. M. Page (General Theol. Sem.), is rector of St. Luke's, at Lebanon, Pa.—E. McK. Whiting, president of the class since graduation, after practicing law for about three years, was forced by failing eyesight to turn to farming. Some three years ago, however, his eyes so far improved that he was able to return to professional work in this city (55 Liberty Street).

1891

Secretary:

G. J. Bayles (LL.B., '93; Ph.D., '95), prize lecturer in sociology in the School of Political Science, began in 1898 the editing of a series of digests of the statute law, annotated, of each of the United States relating to ecclesiastical organizations.—Marcus Simpson (Ph.D., Munich, '98), after studying several years at Columbia and abroad, has become instructor in German at Cornell.

1895

Secretary: S. F. Thayer, 75 Hawthorne Avenue, Yonkers.

C. S. Beckwith (LL.B., '95, N. Y. Law School), "found the profession of law somewhat overcrowded" and became private secretary to the Paterson Iron and Steel Forge Co., in New Jersey.—W. L. Cahn (LL.B., Harvard, '98), since his admission to the Bar in 1899, has "run errands and practiced law in unequal proportions."—J. D. Fitzgerald, II, will spend the next year studying in Spain.

SUMMARIES OF UNIVERSITY LEGISLATION

THE TRUSTEES. JANUARY MEETING

Mr. W. C. Schermerhorn was reelected Chairman and Mr. Pine Clerk of the Trustees for the ensuing year. Mr. Nash was reelected Treasurer for the ensuing three years.

The following named gentlemen were elected to serve on committees: Dr. Wheelock, on finance; Mr. Parsons, on buildings and grounds; Mr. DeWitt, on honors; Mr. Mitchell and Mr. Pine, on education, and Mr. Beekman, on the Library.

A special Committee on Dormitories was appointed, consisting of the President and Messrs. Parsons and DeWitt, for the purpose of giving encouragement to the erection of dormitories in the neighborhood of the University; of drafting suitable regulations for their design and administration; of giving special and official recognition to dormitories conducted in harmony with such regulations; and of recommending to the Trustees, from time to time, the appointment of an officer or officers to administer the regulations so adopted.

The committee on the Library reported that the Southern Society of New York had placed the "Garden Library," belonging to that Society, in the University Library as a deposit.

A vote of thanks was tendered to Mr. John D. Rockefeller for a gift of \$100,000 for the endowment of the "head professorship of the department of psychology;" also to Messrs. E. R. Holden, E. B. Holden and F. Augustus Heinze, for gifts aggregating \$800, for the equipment of the locomotive "Columbia"; also to the Temple Emanuel, for a gift of \$500 for the maintenance of the department of oriental languages.

The President reported that the committee of alumni which

had undertaken to raise funds for a memorial of Hamilton Fish, Jr., proposed to erect a tablet. It was voted that such tablet be accepted and that it be placed temporarily in College Hall, to be removed to Memorial Hall when that building is completed. Permission was also given to the United States Daughters of the War of 1812 to place on the Amsterdam Avenue wall of Fayerweather Hall a tablet commemorating the line of defences on the northern part of Manhattan Island during that war.

It was decided that a reception should be given at the University by the Trustees on or about February 22d.

A draft of a proposed agreement with Barnard College was submitted, and it was

Resolved, That the proposed agreement with Barnard College, this day submitted, be, and the same hereby is, approved, and that the Clerk be authorized on behalf of this corporation to execute such agreement, when it has been approved and executed by the Trustees of Barnard College.

Notice was given of several amendments to the Statutes, relating to the time of payment of tuition fees and of the time of payment of the stipends of Fellows and Scholars; also for the establishment of the George William Curtis Fellowship and the Carl Schurz Fellowship.

The President gave notice, under Chapter III., Section 2, of the Statutes, that the Faculty of applied Science proposed to establish courses in marine engineering, naval architecture and locomotive engineering.

The title of Professor George E. Woodberry was changed from professor of literature to professor of comparative literature, and that of Professor Brander Matthews from professor of literature to professor of dramatic literature.—Professor Henry M. Howe, A.M., B.S., was reappointed professor of metallurgy during the pleasure of the Trustees.

The following appointments were confirmed: H. E. Hale, M.D., as assistant demonstrator in anatomy; Ellsworth Eliot, M.D., as clinical lecturer in surgery; Wray A. Bentley, B.S., as lecturer in metallurgy.

The resignation of John F. Plummer, Jr., A.B., as assistant secretary of the University, to take effect December 31, 1899,

was received and accepted, and Frederick Paul Keppel, A.B., was appointed assistant secretary.

The President reported that Professor W. H. Carpenter had been elected a member of the University Council by the Faculty of Philosophy, in place of Professor Perry, resigned; and that Professor Munroe had been elected by the Faculty of Applied Sciences, in place of Professor Hutton, who, by reason of his election as Dean of the Faculty, had become a member of the Council ex-officio; both terms expiring June 30, 1901. Also that the Faculty of Teachers College had elected Professor Woodhull to represent it upon the Council, for the full term of three years, in place of Professor Baker, whose term expired June 30, 1899.

THE TRUSTEES. FEBRUARY MEETING

The President announced the death of Professor Thomas Egleston, emeritus professor of mineralogy and metallurgy, and stated that by the terms of his will Professor Egleston had bequeathed to the University a collection of books and specimens. The following resolution was adopted:

Resolved, That the Museum connected with the Department of Mineralogy be hereafter known as the "Egleston Mineralogical Museum" in recognition of the services of the late Dr. Thomas Egleston, professor of mineralogy and metallurgy in the School of Mines from the foundation of the School up to the time of his retirement, in 1897, as an emeritus professor.

It was also announced that the Hon. Dorman B. Eaton had left to the University a bequest of \$100,000 (subject to the life interest of his widow), for the endowment and maintenance of a professorship of municipal science and administration.—Two anonymous gifts of \$5,000 each were announced; also a gift of \$1,000 from Mr. F. Augustus Schermerhorn for the equipment of the department of mining, and a gift from Mr. Edgar G. Barratt of an ice-machine.

The President submitted a detailed report on the establishment of a course of marine, naval and locomotive engineering in the school of mechanical engineering, and gave notice of certain proposed changes in the curriculum of the College.

The finance committee submitted a detailed report of the

several trust funds and of the manner in which they are invested.

The committee on building and grounds reported, in reference to the plan for the construction of the first story of University Hall, that the Alumni Memorial Hall Committee had obtained the consent of a very large proportion of the subscribers to the Memorial Hall Fund and had placed the same at the disposal of the Trustees. Authority was given to the Committee to have the plans of the building completed.

Chapter XVI of the Statutes was amended to provide that annual tuition fees shall be paid in equal installments, on or before the last Saturday in October and on or before the third Saturday in February, except that where the amount does not exceed \$100 the whole amount shall be paid at entrance. Chapters XXI and XXII of the Statutes were amended as to the time of payment of stipends of fellowships and scholarships, so as to provide that such stipends shall be paid in semi-annual installments, on or before the last Saturday in October and on or before the third Saturday in February.—Chapter XXI was also amended by adding a new section establishing the "George William Curtis Fellowship."

Professor Brander Matthews was assigned to the Faculty of the College.—The appointment by the Faculty of Medicine of Dr. William H. Caswell as instructor in neurology at the Vanderbilt Clinic was confirmed.

UNIVERSITY STATISTICS

THE figures presented in the appended tables should be of interest to all university men, but particularly to friends of Columbia. Admitting that in all such figures there is much chance for error, that variations in methods of registration and classification render all comparisons somewhat deceptive, and that in this case the figures are not invariably those for the date selected, it may still be possible to draw from the tables some conclusions as to the tendencies in University development.

Registration at Columbia, February 7, 1899 and 1900.	First Year	Second Year	Third Year	Fourth Year	Specials	Graduates †	Total, 1900	Total, 1899	Gain.
Columbia College	119	111	86	93	51		460	399	61
Barnard College (undergraduates) . .	54	38	39	39	70		240	192	48
Total undergraduates							700	591	109
Faculties of Political Science, } Philosophy and Pure Science . }							303	258	45
Barnard College (graduates)							77	65	12
Total non-professional } graduate students † . }							380	323	57
Faculty of Applied Science	135	116	128	59	46	4	488	452	36
Faculty of Law	167	112	99		1		379	349	30
Faculty of Medicine	222	158	157	172	87		796	712	84
Teachers College	44	22	83	48	54	114	365	224	141
Total professional students							2028	1737	291
Total students in University							3108	2651	457
Auditors							30	22	8
Extension students, Teachers College ‡ .							750	1026	-276
Grand total §							3858	3699	159

So far as Columbia is concerned, it is noticeable that every department shows a healthy increase in numbers, although Teachers College is responsible for almost a third of the total gain. This latter figure, of much significance by itself, assumes new importance when compared with the gains of Columbia's neighbors in the East.

† From some points of view the (118) graduate students in the Schools of Applied Science and in Teachers College are "non-professional."

‡ Extension students of Teachers College are required to do as much work as those taking the same courses in the College and are subject to the same examinations.

§ Not including (567) pupils in the Horace Mann School and (59) pupils in the Experimental School of Teachers College.

Registration at Eastern Universities on or about Feb. 7, 1900	Columbia	Cornell	Harvard	Princeton	Pennsylvania	Yale
College	460	} 677	1902	688	} 400	1224
College for women	240		393	...		...
Total undergraduates	700	677	2295	688	400	1224
Total non-professional graduate students }	380	172	326	141	144	283
Scientific Schools	488	797	495	363	306	571
Law School	379	178	613	...	312	195
Medical School	796	331	558	...	682	135
Teachers College	365	...	...	...	...	...
Other professional schools . . . . .	...	135	209	4	549	297
Total professional students	2028	1441	1875	367	1849	1198
Total students in University	3108	2290	4406	1196	2393	2705
Double registration . . . . .	...	20	12	...	10	188
Net total	3108	2270	4484	1196	2383	2517
<i>Gain within one year</i>	<i>457</i>	<i>225</i>	<i>164</i>	<i>97</i>	<i>-130</i>	<i>6</i>
Auditors	30	...	...	...	28	...
Extension courses	750	...	...	...	...	...
Courses for teachers . . . . .	...	...	...	...	262	167
Summer session . . . . .	...	424	856	...	...	...
Other special courses . . . . .	...	89	...	...	...	...
Grand total	3888	2783	5340	1196	2673	2684
Regular teachers	389*	314	448	83	260	257

The third table arranges in order of size the schools of the Eastern universities treated in the second table. When compared with the corresponding table published by the *QUARTERLY* a year ago, this table reveals some interesting changes.

Comparative Size of	Under-graduates	Non-professional graduate students	Professional students	Total	Totals, including summer schools, etc
Columbia	3	1	1	2	2
Cornell	5	4	4	5	3
Harvard	1	2	2	1	1
Pennsylvania	6	5	3	4	5
Princeton	4	6	6	6	6
Yale	2	3	5	3	4

* Not including teachers in the schools of Teachers College.

THE ROESSLER & HASSLACHER CHEMICAL CO.

100 William Street, New York

CHICAGO BOSTON PHILADELPHIA NIAGARA FALLS PERTH AMBOY, N. J.

CHARLES C. KING

Custom Tailor

FOREIGN AND DOMESTIC WOOLENS

125th Street, 7 West
Y. M. C. A. BUILDING

NEW YORK

NICHOLAS RUINART was the first man
to make and sell
Champagne, in 1729; and he founded his house to make

RUINART CHAMPAGNE

THE BEST WINE IN THE WORLD

At Chicago in 1892 the World's Fair Jury gave to RUINART
the highest and only award for Brut Champagne. The
wine-wise of the world sustain that award and say the
One Wine is RUINART



AROMATIC DELICACY,
MILDNESS AND PURITY.



Milo
CIGARETTES.

A BLEND OF THE **FINEST EGYPTIAN**
SURBRUG 204 Broadway, N.Y. Agent. **TOBACCO.**

The Columbia University Press

was organized with the approval of the Trustees of the University, and incorporated June 8, 1893, for the purpose of promoting the publication of works embodying the results of original research. The Press is a private corporation, related directly to Columbia University by the provisions that its trustees must always be officers of the University and that the President of Columbia University shall be President of the Columbia University Press.

LATEST ISSUES AND ANNOUNCEMENTS

The History of Literary Criticism in the Renaissance

WITH SPECIAL REFERENCE TO THE INFLUENCE OF ITALY IN THE FORMATION AND DEVELOPMENT OF MODERN CLASSICISM. By JOEL ELIAS SPINGARN.

Cloth. 8vo. \$1.50, net.

"Students of literary theory in its historical aspect will find this work an indispensable part of their apparatus."—*Dial*.

Romances of Roguery

AN EPISODE IN THE DEVELOPMENT OF THE MODERN NOVEL. By FRANK WADLEIGH CHANDLER. PART I. The Picaresque Novel in Spain. **\$2.00, net.**

"A distinct addition to the library of analytical and interpretive books, and is of great interest."—*Independent*.

Spanish Literature in England Under the Tudors

By JOHN GARRETT UNDERHILL.

\$2.00, net.

Other volumes in this series of STUDIES IN LITERATURE will be issued from time to time, the results of literary research or criticism under the authorization of the Department of Literature, Columbia University.—GEORGE E. WOODBERRY and BRANDER MATTHEWS, Professors.

"A book that ought to have a permanent place in the history of that period."—*Chicago Evening Post*.

Li Livres du Gouvernement Des Rois

Being a thirteenth-century French version of Egidio Colonna's treatise "De Regimine Principum." Edited by SAMUEL PAUL MOLENAER, A.M., Instructor in the University of Pennsylvania. With introduction, notes, and a page fac-simile.

Cloth. 8vo. \$3.00, net.

Of great historical interest, especially to students of the theory of education in its historical aspects.

The Government of Municipalities

By the Hon. DORMAN B. EATON, formerly Commissioner of the United States Civil Service. **Cloth. 8vo. \$4.00, net.**

"Will take immediate rank as the leading work on the important topic of which it treats."—*Chicago Tribune*.

Francis Lieber: His Life, Times and Political Philosophy.

Cloth. \$1.75, net

Edited by LEWIS R. HARLEY, Central High School, Philadelphia. Of interest to all, and pre-eminently to those who knew Professor Lieber as a distinguished member for fifteen years of the Faculty of Columbia College.

"Lieber well deserves to be thus kept alive in the minds of the younger generation, for he was all his long and useful life a teacher."—*Public Ledger*, Phila.

PUBLISHED FOR

The Columbia University Press

By THE MACMILLAN COMPANY, 66 Fifth Avenue, New York City.

The Columbia University Press

EARLIER ISSUES

Drisler Memorial Volume

Classical Studies in Honour of Henry Drisler, in commemoration of the Fiftieth Year of his Official Connection with Columbia College, and affectionately dedicated by the contributors, his pupils. With Portrait. 8vo. Cloth. \$4.00, *net*.

Memoirs of Frederick A. P. Barnard, D.D., LL.D. Tenth President of Columbia College. \$4.00, *net*.

Atlas of Nerve-Cells

By M. ALLEN STARR, M.D., Ph.D., with the Coöperation of OLIVER S. STRONG, Ph.D., and EDWARD LEAMING. With 53 albertype plates and 13 diagrams. Royal 4to. \$10.00, *net*.

Bismarck and German Unity

By MUNROE SMITH, LL.D. (Göttingen), Professor of Roman Law and Comparative Jurisprudence, Columbia University. Cloth. 12mo. \$1.00, *net*.

Battle of Harlem Heights

An Historical Sketch of the Battle Fought Sept. 16, 1776, on the Plateau now known as Morningside Heights, with Brief Review of the Preceding Campaign in and near New York City. By HENRY P. JOHNSTON, A.M., Professor of History, College of the City of New York. Gilt Cloth. 8vo. \$2.00, *net*.

Zoroaster, The Prophet of Ancient Iran

By A. V. WILLIAMS JACKSON, Professor of Indo-Iranian Languages, Columbia University. Cloth, 8vo, \$3.00 *net*.

An Atlas of the Fertilization and Karyokinesis of the Ovum

By EDMUND B. WILSON, Ph.D., Professor in Invertebrate Zoölogy in Columbia University, with the coöperation of EDWARD LEAMING, M.D., F.R.P.S., Instructor in Photography at the College of Physicians and Surgeons, Columbia University. Cloth. 4to. \$4.00, *net*.

THE COLUMBIA BIOLOGICAL SERIES

Edited by HENRY FAIRFIELD OSBORN and EDMUND B. WILSON.

- | | | | |
|---|-------------------|---|-------------------|
| I. From the Greeks to Darwin | \$2.00 <i>net</i> | IV. The Cell in Development and Inheritance | \$3.00 <i>net</i> |
| II. Amphioxus and the Ancestry of the Vertebrates | 2.50 <i>net</i> | V. The Foundations of Zoology | 2.50 <i>net</i> |
| III. Fishes, Living and Fossil | 2.50 <i>net</i> | <i>Other volumes are in preparation.</i> | |

The Principles of Sociology

An Analysis of the Phenomena of Association and of Social Organization. By FRANKLIN HENRY GIDDINGS, M.A., Professor of Sociology, Columbia University. Third Edition. 8vo. \$3.00, *net*.

Municipal Home Rule

A Study in Administration. By FRANK J. GOODNOW, LL.D., author of "Comparative Administrative Law." 12mo. \$1.50, *net*.

Municipal Problems

By the same Author. Cloth, \$1.50, *net*.

The Science of Statistics

By RICHMOND MAYO-SMITH, Ph.D., Professor of Political Economy and Social Science, Columbia University.

I. Statistics and Sociology.

\$3.00, *net*.

II. Statistics and Economics.

\$3.00, *net*.

Essays on Taxation

By Professor EDWIN R. A. SELIGMAN, Professor of Political Economy, Columbia University. Second Edition. \$3.00, *net*.

The Shifting and Incidence of Taxation

By the author of Essays on Taxation. Second edition, completely revised and enlarged. Cloth, 8vo, \$3.00 *net*.

PUBLISHING AGENTS,

THE MACMILLAN COMPANY, 66 Fifth Ave., New York

VACUUM OIL COMPANY

ROCHESTER and OLEAN, N. Y.

MAIN OFFICE: ROCHESTER, N. Y.

MANUFACTURERS OF

HIGH-GRADE LUBRICATING OILS AND GREASES LEATHER AND HARNESS OILS

BRANCH AGENCIES AND WAREHOUSES

AMERICAN

NEW YORK
29 Broadway
BOSTON
45 Purchase Street
PHILADELPHIA
305 Walnut Street
TORONTO
Front and Scott Streets
MONTREAL
590 St. Paul Street
HALIFAX
44 Bedford Row

FOREIGN

BOMBAY
BUDAPEST
BUENOS AYRES
CAPE TOWN
GENOA
HAMBURG
LONDON
MELBOURNE
SINGAPORE
COPENHAGEN
KOBE (JAPAN)
PARIS

SEND FOR BOOK ON "LUBRICATION," MAILED FREE
ON APPLICATION



KNICKERBOCKER TRUST CO.

234 Fifth Avenue 66 Broadway

Capital, \$1,000,000.

Transacts a General Banking Business. Allows **INTEREST ON DAILY BALANCES**, subject to check through the New York Clearing-house, or payable at sight, and issues Certificates of Deposit bearing interest.

Designated by the Banking Department as a Legal Depositary for Savings Banks, Court and Trust Funds.

Acts as Trustee of Railroad and other Mortgages; also as Transfer Agent and Registrar of stock of corporations, and as Fiscal Agents for cities and corporations. Also acts as Executor, Administrator, Trustee, Guardian, and Committee of Estates, and as Depositary under Reorganization and Escrow Agreements.

Takes full charge of Real and Personal Estates. Wills may be deposited and will be safely kept free of charge.

Safe Deposit Vaults at Both Offices.

OFFICERS:

CHARLES T. BARNEY, President.
FRED'K L. ELDRIDGE, 1st Vice-President.
JOSEPH T. BROWN, 2nd Vice-President.
ALFRED B. MACLAY, Sec'y and Treas.
FRED'K GORE KING, Asst. Sec'y and Asst. Treas.
WM. B. RANDALL, Trust Officer.

Board of Directors:

Jas. S. Auerbach,	Charles F. Watson,
Harry B. Hollins,	Fred'k G. Bourne,
Jacob Hays,	C. Lawrence Perkins,
Charles T. Barney,	Alfred White,
A. Foster Higgins,	Charles R. Flint,
Henry W. T. Mall,	Amzi L. Barber,
Andrew H. Sands,	Charles T. Cook,
James H. Breslin,	John Magee,
L. Townsend Burden,	Henry A. Morgan,
Hon. E. V. Loew,	Henry C. Berlin,
Henry F. Dimock,	Charles W. Gould,
	Frederick L. Eldridge.

LONDON CORRESPONDENTS.

THE MANCHESTER AND LIVERPOOL DISTRICT
BANKING CO., Limited.

AND

Messrs. Melville Fickus & Co., Limited.

Guaranty Trust Co. of New York.

NASSAU, CORNER CEDAR STREET.

CAPITAL, - - - - - \$3,000,000
SURPLUS, - - - - - \$3,500,000

ACTS AS TRUSTEE FOR CORPORATIONS, FIRMS AND INDIVIDUALS, AS GUARDIAN, EXECUTOR, AND ADMINISTRATOR, TAKES ENTIRE CHARGE OF REAL AND PERSONAL ESTATES.

INTEREST ALLOWED ON DEPOSITS
subject to cheque or on certificate.

DRAFTS ON ALL PARTS OF GREAT BRITAIN, FRANCE AND GERMANY BOUGHT AND SOLD. COLLECTIONS MADE.
TRAVELLERS' LETTERS OF CREDIT AVAILABLE IN ALL PARTS OF THE WORLD, AND COMMERCIAL LETTERS OF CREDIT ISSUED.

WALTER G. OAKMAN, President.
ADRIAN ISELIN, Jr., Vice-President.
GEORGE R. TURNBULL, 2d Vice-President.
HENRY A. MURRAY, Treas. and Sec.
J. NELSON BORLAND, Asst. Treas. and Sec.
WM. C. EDWARDS, 2d Asst. Treas. and Sec.
JOHN GAULT, Manager Foreign Dept.

DIRECTORS.

Samuel D. Babcock,	Adrian Iselin, Jr.,
George F. Baker,	Augustus D. Juilliard,
George S. Bowdoin,	James N. Jarvis,
August Belmont,	Richard A. McCurdy,
Frederic Cromwell,	Levi P. Morton,
Walter R. Gillette,	Alexander E. Orr,
G. G. Haven,	Walter G. Oakman,
E. H. Harriman,	Henry H. Rogers,
R. Somers Hayes,	H. McK. Twombly,
Charles R. Henderson,	Frederick W. Vanderbilt,
	Harry Payne Whitney.

LONDON BRANCH.

33 LOMBARD STREET, E. C.

Buys and sells exchange on the principal cities of the world, collects dividends and coupons without charge, issues travellers' and commercial letters of credit, receives and pays interest on deposits subject to cheque at sight or on notice, lends money on collaterals, deals in American and other investment securities, and offers its services as correspondent and financial agent to corporations, bankers and merchants.

Bankers.

BANK OF ENGLAND,
CLYDESDALE BANK, Limited,
NATIONAL PROVINCIAL BANK OF
ENGLAND, Limited,
PARR'S BANK, Limited.

Solicitors.

FRESHFIELDS AND WILLIAMS.

London Committee.

ARTHUR JOHN FRASER, CHAIRMAN.
DONALD C. HALDEMAN.
LEVI P. MORTON.



Columbia University in the City of New York

APPOINTMENT COMMITTEE

JAMES HULME CANFIELD, A.M., LL.D.

Librarian

NICHOLAS MURRAY BUTLER, Ph.D., LL.D.

Professor of Philosophy and Education

FREDERICK REMSEN HUTTON, E.M., Ph.D.

Professor of Mechanical Engineering

EDWIN ROBERT ANDERSON SELIGMAN, Ph.D.

Professor of Political Economy and Finance

JAMES MCKEEN CATTELL, Ph.D.

Professor of Psychology

HENRY ALFRED TODD, Ph.D.

Professor of Romance Philology

GEORGE WILLIAM KIRCHWEY, A.B.

Nash Professor of Law

GEORGE RICE CARPENTER, A.B.

Professor of Rhetoric and English Composition

JAMES RIGNALL WHEELER, Ph.D.

Professor of Greek

CALVIN THOMAS, A.M.

Gebhard Professor of the Germanic Languages and Literature

JAMES EARL RUSSELL, Ph.D.

Dean of Teachers College

The duty of the Appointment Committee, instituted by authority of a resolution of the University Council, passed April 19, 1898, is to recommend graduates of the College or University for teaching or other positions and to assist competent graduates to obtain such positions.

The Committee keeps classified lists of those who wish employment or positions other than those they have held, and will be glad to be informed promptly of present or prospective vacancies in positions for which college-trained men or women are eligible.

No fees are charged for any services rendered by the Committee.

Communications should be addressed to DR. J. H. CANFIELD, Chairman of the Appointment Committee, Columbia University, New York City.